

**FIFTEENTH ANNUAL REPORT
OF THE
GERIATRIC AND LONG TERM CARE
REVIEW COMMITTEE
TO THE CHIEF CORONER
FOR THE PROVINCE OF ONTARIO**



APRIL 2005

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**Fifteenth Annual Report of the Geriatric/Long Term Care Review Committee
to the Chief Coroner for the Province of Ontario – April 2005**

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INTRODUCTION

Originally formed in December 1989, the Geriatric/Long Term Care Review Committee to the Chief Coroner for the Province of Ontario has just completed its fifteenth full year of operation.

The current Committee membership is as follows:

Dr. Sid Feldman	Family Physician
Dr. Margaret Found	Family Physician/Coroner
Dr. Lynne Fulton	Emergency Room Physician
Dr. Barry Goldlist	Geriatrician
Dr. Michael Gordon	Geriatrician
Dr. Jennifer Ingram	Geriatrician
Dr. Heather MacDonald	Geriatrician
Dr. Sharon Marr	Geriatrician
Ms. Joy Richards	Registered Nurse
Ms. Marsha Rosen	Registered Dietician
Dr. Jim Ruderman	Family Physician
Dr. Peter Clark	Regional Supervising Coroner

When indicated, health care professionals from other disciplines (i.e. psychogeriatrics, gastroenterology, infectious diseases) have assisted the Committee with case reviews.

METHODOLOGY

In 2004, cases were referred to the Committee from a variety of sources including local coroners, Regional Supervising Coroners, and the Office of the Chief Coroner. In previous years, cases were also referred by advocacy groups and long term care institutions.

The Committee conducts an independent review of the available records relevant to the specific case and then prepares a final report including recommendations where indicated, to be sent back to the local community for discussion and implementation with the aim being to prevent future deaths in similar circumstances.

COMMITTEE ACTIVITIES 2004

The Committee conducted 25 reviews in 2004. Yearly case review statistics for the past 10 years are included in the table below.

YEAR	NUMBER OF CASES REVIEWED	TOTAL NUMBER OF DEATHS	NUMBER OF CLUSTER INVESTIGATIONS WITH (NUMBER OF DEATHS)
1995	26	26	0
1996	19	19	0
1997	20	20	0
1998	18	18	0
1999	15	15	0
2000	20	25	1(6)
2001	30	30	0
2002	21	21	0
2003	17	17	0
2004	25	38	HOMICIDE REVIEW

Committee members participated in the following activities in 2004:

- (1) Regular monthly meetings as required,
- (2) Regional Coroner's Reviews,
- (3) Liaised with:
 - Individuals,
 - Government Ministries
 - Acute and chronic care general and psychiatric hospitals,
 - Public health departments,
 - Private industry long term care facilities,
 - Medical and nursing associations,

- Advocacy groups,
 - Ontario and American Coroners and Medical Examiners
 - The Chief Coroners of the other Canadian Provinces and Territories,
 - Long term care associations and institutions throughout Canada,
 - The International Association of Coroners and Medical Examiners,
and
 - Various professional gerontological associations,
- (4) Provided independent expert evidence at an Inquest

In 2004, the Committee was asked to independently review the documentation present in fourteen (14) files in the Office of the Chief Coroner wherein the manner of death had been identified as a homicide of a resident of a licensed long term care facility (LTCF). The review was requested to assist in the presentation of evidence at the Inquest into the deaths of Mr. Ezzeldine El Roubi and Mr. Pedro Lopez to identify common factors in the deaths, possible trends in homicides in LTCFs, and to assist the Jury in making recommendations to prevent a future death in a similar circumstance.

RECOMMENDATIONS

PREAMBLE

The **Recommendations Section** contains a number of general recommendations which, in the Committee's mind, should be widely circulated throughout the Province to all interested individuals, facilities, ministries, agencies, special interest groups, health care professionals and their licensing bodies, all provincial coroners, the Chief Coroners and Medical Examiners of the other Canadian Provinces and Territories, and any other individual and/or group on request.

It should be noted that the recommendations are just that, recommendations. They have been formulated based on the specific circumstances of the 25 cases (38 deaths) reviewed by the Committee, cases referred because of perceived problems identified by the referring person, institution, or agency.

The Committee is aware that quality long term care does exist in Ontario and that the deaths reviewed represent only a small portion of the total number of deaths of the elderly and residents of long term care institutions investigated by coroners.

**THE RECOMMENDATIONS ARE INTENDED TO PROMOTE DISCUSSION
AND SHOULD NOT BE INTERPRETED AS POLICY DIRECTIVES FROM ANY
AGENCY OR MINISTRY OF GOVERNMENT INCLUDING THE OFFICE OF
THE CHIEF CORONER**

The second part of the **Recommendations Section** includes six case reviews. The case reviews selected for inclusion in this year's annual report are excellent examples of some of the issues that health care professionals encounter in present day Ontario. The Committee is of the opinion that, not only will the health care readership be able to recognize the potential for the occurrence of similar situations within their local communities, but also the readership will gain an understanding of how the Committee collectively thinks and develops recommendations that are directed towards the prevention of future deaths in similar circumstances.

The third part of the **Recommendations Section** contains an analysis of the recommendations generated over the last five years.

GENERAL RECOMMENDATIONS

(A) MEDICAL/NURSING MANAGEMENT

Total Number of Cases Reviewed – 2004: 25

Total Number of Cases with Recommendations
Related to this Topic Area: 14

1. Health care professionals should be reminded that constipation and obstipation are common, preventable, and treatable medical conditions that affect the elderly. Untreated, these conditions can be devastating and may even result in death. Once obstipation is suspected, aggressive investigation and treatment should be considered on a case by case basis.

As with many geriatric syndromes, obstipation may present either typically (abdominal pain, fecal incontinence) or atypically (confusion, delirium). Health care professionals should be especially wary of elderly patients who present with constipation/obstipation who have associated systemic symptoms (tachycardia).

In these cases, the ordering of laboratory investigations and an EKG should be considered on a case by case basis. Elderly patients receiving medications known to decrease bowel motility such as narcotics or other proconstipatory drugs such as calcium channel blockers should be put on a prophylactic bowel regimen. The regimen should include the addition of fibre to their diet, the provision of stool softeners, and prn laxatives such as Milk of Magnesia or Lactulose every night that there isn't a bowel movement. If there is no bowel movement for three days, consideration should be given to the administration of an enema.

The occurrence of overflow incontinence should alert the treating health care professionals to the possibility that the patient has developed fecal impaction with overflow incontinence. Fecal impaction can be difficult to treat and should be treated vigorously when present. Careful abdominal and rectal examinations should be performed. The findings of soft stool or no stool in the rectum does not absolutely rule out the presence of fecal impaction.

In these cases, an abdominal flat plate xray and/or a CT scan should be ordered to rule out the possibility of a higher impaction that cannot be detected on rectal examination and/or a developing acute/subacute bowel obstruction (dilated loops of bowel with air/fluid levels). While manual disimpaction should be the first intervention attempted, the presence of

obstipation with a higher impaction should primarily be managed with enemas to clear the bowel from below. In some cases, the addition of oral osmotic laxatives such as Lactulose can be used to clear the bowel from above. Gastrointestinal lavage solutions have also been proven to be very effective in treating fecal impaction.

Health care professionals should always be observant for the development of complications and especially for the development of complications related to the treatment of obstipation/fecal impaction.

Reference: Constipation Can Be Deadly – Canadian Family Physician Volume 38, October 1992, Goldlist, B., Naglie, G., Gordon, M.

Comment: This recommendation was made in two reviews in 2004.

2. Health care professionals should be reminded that disease presentation in the elderly is frequently atypical and may vary greatly from patient to patient. A subtle change in a patient's clinical status may well indicate that something serious is going on which may not be readily apparent. The underlying cause(s) of these atypical presentations may be missed if the investigator does not obtain an appropriate history, conduct a thorough examination, and judiciously utilize available laboratory and imaging resources.

For example, the development or worsening of abnormal behaviour in an elderly, cognitively impaired resident often represents the presence of an acute illness or a worsening of a chronic illness which warrants further medical investigation, treatment of the abnormal behaviour, and treatment of the illness. Not only should the investigator look at the resident's known medical conditions such as diabetes mellitus, but also the investigator should look for other possible causes of the worsening of the resident's clinical status, such as an intercurrent, infectious process. In addition, consideration should be given to reviewing and modifying external environmental factors such as a change in the resident's daily routine, a change in room location, and staff training of front line workers.

3. Health care professionals should be reminded of the importance of identifying a patient's present and future care needs. The care needs must be realistic and based on both the present care needs and the likely progress of the patient's disease process.

For example, designating a patient with severe pain due to metastatic malignant disease for rehabilitation rather than for palliation may be unrealistic and may foster the development of false hopes for that patient and his/her family members.

4. Health care professionals working in long term care facilities should be reminded of the importance of conducting regular health care assessments on their elderly patients. In addition, elderly patients who develop a change in their medical status should be assessed promptly and comprehensively.
5. Health care professionals caring for the elderly should be reminded of the importance of providing comprehensive, ongoing, regular care for their ill, frail, elderly patients. When these patients are no longer able to attend in the office setting, provisions to arrange for medical supervision in the community should be arranged.
6. Health care professionals should be reminded of the importance of ensuring that chronically ill elderly patients who develop an acute illness are transferred to and monitored in an appropriate clinical setting.
7. Health care professionals working on Geriatric and/or Psychogeriatric Assessment Teams need to be reminded that, in addition to making recommendations regarding the patient's pharmacologic and non-pharmacologic care, arranging an admission to an alternate level of care such as a general hospital and/or psychiatric unit or a behaviour management unit is an important part of the Assessment Team's mandate, especially when the patient's aggressive behaviours cannot be safely managed in the long term care facility.

Comment: This recommendation was made in two reviews in 2004.

8. Health care professionals should be reminded of the importance of utilizing medical specialty services when faced with residents with chronic, resistant medical conditions. For example, elderly diabetic residents with persistently elevated blood sugars may benefit from the expertise of a specialist in internal medicine, geriatric medicine, or endocrinology.
9. Health care professionals should be reminded of the importance of holding a formal case conference on residents newly admitted to a long term care facility. All members of the health care team including the patient and/or family members and/or the substitute decision maker should be required to attend this initial case conference.
10. Health care professionals should be reminded of the importance of holding early "case" or "care" conferences with all members of the treatment team including the patient and his/her family members. Documentation on the medical record of the issues discussed and proposed therapeutic interventions should be mandatory.

11. Health care professionals caring for elderly, cognitively impaired, demented residents with abnormal behaviours should have access to ongoing training in the identification and management of these conditions. Once these conditions have been identified and a management strategy developed, the importance of long term monitoring of the condition cannot be overemphasized.
12. Health care professionals should be reminded of the importance of conducting a full investigation looking for potentially treatable causes for the resident's worsening condition. Implicit in this recommendation is the need for health care professionals to intimately understand, routinely review, and carefully address factors affecting the disinhibition of impulse control.

The assessment should include a review of environmental factors such as a change in room location, staffing numbers, staff training, and changes in a resident's daily routine.

Untreated, these conditions can be devastating and result in death.

13. Health care professionals should be reminded that changes in an elderly patient's clinical condition including behavioural changes may indicate the presence of a potentially serious medical illness such as a delirium. Assessment of these patients should, at a minimum, precipitate a comprehensive medical assessment including a review of the patient's past medical history and a critical review of the patient's medication profile looking for potentially treatable causes of the patient's deteriorating clinical condition.

Comment: This recommendation was made in three reviews in 2004.

14. Health care professionals caring for the elderly should be reminded of the importance of ensuring that the complex medical needs of frail, ill elderly patients are appropriately managed. This is especially important for health care professionals working in post surgical units. The climate of increased waiting times to transfer a patient to a long term care facility bed should never negatively impact on the care and safety needs of the patient.
15. Health care professionals should be reminded of the importance of carefully and comprehensively reviewing the presence and severity of acute and chronic health care issues and the investigations and previous therapeutic interventions prescribed for these issues.

16. Health care professionals working in the acute care sector should be reminded of the importance of ensuring that their therapeutic assessments and interventions are not negatively influenced by the fact that their patient came from a long term care institution.
17. Health care professionals caring for elderly residents with chronic atrial fibrillation should be reminded of the importance of anticoagulant therapy to prevent peripheral embolization. The importance of closely monitoring the resident to ensure that the INR is in the therapeutic range cannot be overemphasized.
18. Health care professionals should be reminded of the importance of utilizing both pharmacologic and non-pharmacologic options for elderly residents designated as requiring palliative care.
19. Health care professionals should be reminded of the importance of closely monitoring the intravascular volume status of elderly patients with ongoing fluid loss (i.e. diarrhea).
20. Health care professionals should be reminded of the importance of carefully monitoring the clinical status of elderly patients with chronic obstructive pulmonary disease with CO₂ retention. The importance of monitoring arterial blood gases in relation to the need for sedative and analgesic medications can not be overemphasized.
21. Health care professionals should be reminded of the importance of conducting an appropriate investigation in the elderly with chronic obstructive pulmonary disease with CO₂ narcosis to determine the cause of the narcosis and whether or not the narcosis is treatable.
22. Health care professionals should be reminded of the importance of comprehensively reviewing any and all allegations of elder abuse. The importance of obtaining the early involvement of a psychogeriatric assessment service cannot be overemphasized.

(B) COMMUNICATION AND DOCUMENTATION

Total Number of Cases Reviewed – 2004: 25

Total Number of Cases with Recommendations
Related to this Topic Area: 9

1. Health care professionals should be reminded that family members are an important part of the health care team. Efforts should be taken to educate family members on the complexities of the resident's medical impairments, the short and long term goals of the prescribed therapeutic interventions, the reasons why specific therapies have been prescribed, and the potential complications that could develop.

Despite the best efforts of all members of the health care team including family members to achieve positive outcomes, it has been the Committee's experience that the multiple health conditions present in the ill elderly resident often results in ongoing potentially debilitating problems and/or the development of additional, unexpected complications.

The ongoing education of family members should form an integral part of the care plan. Even with this process, family members may still have difficulty accepting the inevitability of the demise of an elderly loved one.

In these situations, obtaining the early involvement of a social worker or a medical ethicist may prove to be invaluable in resolving the concerns of family members and the health care professionals.

Documentation of the issues and process to resolve the issues should be mandatorily recorded on the medical record.

Comment: This recommendation was made in two reviews in 2004.

2. Health care professionals should be reminded of the importance of communicating with patients, if competent, and/or family members and/or substitute decision makers the need for various treatment modalities and what alternatives exist to the recommended treatment modalities. Documentation of the information exchange on the medical record should be mandatory.
3. Health care professionals should be reminded of the importance of communication amongst all members of the health care team including family members. The importance of holding case conferences involving all members of the health care team including family members for the purpose of ensuring adequate communication, the relating of physical findings, and the clarification of realistic treatment decisions and goals

cannot be overemphasized. Documentation of the entire process on the medical record should be mandatory.

Comment: This recommendation was made in two reviews in 2004.

4. Health care professionals should be reminded of the importance of **TIMELY AND DIRECT** communication amongst **ALL** members of the health care team including family members in situations where a patient's clinical condition suddenly, unexpectedly, and/or unexplainably changes, and/or when family members have expressed concerns regarding the patient's clinical course. The importance of documenting the information communicated and with whom the communication has occurred cannot be overemphasized.

Comment: This recommendation was made in two reviews in 2004.

5. Given that the ill elderly frequently require the management expertise of multiple medical consultants (i.e. – psychiatrist, cardiologist, endocrinologist, respirologist), health care professionals should be reminded of the extreme importance of direct communication with the patient's primary care or most responsible physician.
6. Health care professionals should be reminded of the importance of good communication amongst ALL members of the health care team including family members especially if difficulties of any type, such as unrealistic expectations of care, arise.
7. Health care professionals should be reminded of the importance of good communication with family members when it is known that the patient's/resident's clinical condition is likely going to decline. The importance of establishing reasonable goals for treatment and expectations in high risk, unstable clinical situations cannot be overemphasized.
8. Health care professionals caring for the elderly should be reminded of the importance of bidirectionally communicating information between acute care and long term care institutions. For example, when a long term care resident is assessed in the emergency room and found to have an abnormal laboratory result, that information should be communicated to the long term care institution at the time of the resident's return to the long term care institution.
9. Health care professionals should be reminded of the importance of keeping complete, comprehensive, and accurate progress notes regarding assessments and treatment decisions. Frequently, the Committee finds these notes to be absent, scanty, incomplete, irrelevant, inaccurate,

and/or illegible. These notes should meaningfully reflect issues identified by all members of the health care team (including the family) and include the reasons why certain treatments are/are not being done in relation to these issues.

The recording of progress notes by medical and nursing health care professionals such as wound care consultants is of vital importance in ensuring that all members of the health care team and especially the most responsible physician are aware of the various treatment options recommended by the various members of the health care team.

10. Health care professionals should be reminded of the importance of completing a comprehensive annual assessment on residents of long term care facilities. Documentation of the results of the assessment on the resident's medical record should be mandatory. The recorded results will form a baseline against which future findings can be compared.
11. Health care professionals should be reminded of the importance of recording complete, comprehensive, and accurate progress notes regarding treatment decisions and other assessments. The principle of "not documented means not done" has been repeatedly established in the past.
12. Health care professionals should be reminded of the importance of documenting a change in an elderly patient's medical diagnoses and proposed treatment strategies to manage these conditions.
13. Health care professionals should be reminded of the importance of ensuring that "documentation by exception" charting is consistent with "incidental charting".

(C) THE USE OF DRUGS IN THE ELDERLY

Total Number of Cases Reviewed – 2004: 25

Total Number of Cases with Recommendations
Related to this Topic Area: 7

1. Health care professionals should be reminded of the potential for the development of complications, overuse, and abuse of medications which are commonly used and considered to be “safe”.

For example, the use of “invisible drugs” such as caffeine, nicotine, and alcohol may initially appear to have a beneficial affect on a cognitively impaired resident. On the other hand, the continued use of these psychoactive substances may contribute to the development of unacceptable side effects, such as aggressive behaviour.

2. Health care professionals should be reminded of the five “Rs” of medication administration. The Right dosage of the Right medication must be given to the Right patient by the Right route of administration for the Right reason!

Comment: This recommendation was made in two reviews in 2004.

3. When using psychoactive drugs in the ill elderly, the lowest dose possible should be the initial dose and further doses titrated upwards depending on the response unless there is convincing evidence that a higher dose is necessary because of compelling clinical considerations (i.e. acute delirium) which puts the patient at extreme risk and requires rapid intervention to eliminate the associated agitation which might interfere with medical care.
4. The licensed long term care facility should arrange for an independent, external review of the facility’s medication administration procedures. Ideally, the review should be conducted by a nursing health care professional and a pharmacist with extensive experience in caring for the elderly in the long term care setting.
5. Health care professionals should be reminded of the importance of writing PRN orders for narcotics as precisely as possible. Not only should the indication for the order be written, but also specific instructions should be given to nursing staff to guide them on selecting the choice of dosage.

Comment: This recommendation was made in two reviews in 2004.

6. Health care professionals should be reminded that Meperidine Hydrochloride is a narcotic that should rarely, if ever, be prescribed for the elderly because of its prolonged half life, penchant for causing and/or exacerbating a delirium, and tendency to mask other symptoms. If narcotic analgesia is required, consideration should be given to using a narcotic such as Morphine Sulfate which has a shorter half life and less anticholinergic effects.
7. Health care professionals should be reminded of the importance of considering the implementation of a preventative bowel routine in elderly patients who require narcotic analgesia.
8. The hospital should revise the Acute Pain Service's order sheet to ensure that constipation is included as a common side effect of narcotic use.
9. Health care professionals should be reminded that Lithium is a potentially toxic medication, especially in the elderly who frequently have multiple diseases that may affect multiple systems for which they are receiving multiple medications. For example, elderly patients on Lithium therapy are at increased risk to develop toxicity if diuretic therapy is required. Regular monitoring of serum Lithium levels should be mandatory.

(D) ADMISSION/DISCHARGE/TRANSFER PROCEDURES

Total Number of Cases Reviewed – 2004: 25

Total Number of Cases with Recommendations Related
To this Topic Area: 3

1. Health care professionals caring for the elderly and especially health care professionals working in Community Care Access Centres should be reminded that the long term care placement process is a process and not an event. The importance of managing the total patient including both the medical and placement needs cannot be overemphasized.

Once an elderly patient has been accepted for placement by the Community Care Access Centre, the importance of clearly designating who is responsible for the elderly patient's primary care cannot be overemphasized.

Placement applications judged as urgent by the referring physician/agency/Community Care Access Centre should be processed in a manner that takes the urgent status into consideration.

Once a referral has been accepted by the Community Care Access Centre, an appropriate monitoring protocol with clearly defined timelines should be initiated relevant to the clinical and safety needs of the elderly client.

2. Health care professionals involved in the hospital discharge planning and community placement process should be reminded of the importance of insuring that the care and safety needs of their elderly clients are accurately documented and communicated to the receiving institution. Discharging an elderly client with complex care needs to a long term care institution that is neither staffed nor resourced to care for heavy care residents is a practice that should be discouraged.
3. Health care professionals caring for the elderly should be reminded of the importance of conducting a thorough and current assessment at the time of completing the application for placement in a long term care facility.

(E) DETERMINATION OF CAPACITY AND CONSENT FOR TREATMENT/DNR

Total Number of Cases Reviewed – 2004: 25

Total Number of Cases with Recommendations Related To this Topic Area: 2

1. Health care professionals should be reminded of the importance of writing a detailed progress note when entering a “DNR” order on a patient’s medical record. The progress note should clearly indicate the rationale behind the decision making process and by whom the decision was made. This note could then eliminate ambiguity as to what other investigations and/or treatments are indicated in the event of the occurrence of an acute problem, short of carrying out CPR or assisted ventilation. The importance of reviewing this decision with the patient if competent, or family members, cannot be overemphasized. This is especially important if the patient has developed a potentially treatable medical complication such as a drug induced respiratory failure.

Comment: This recommendation was made in two reviews in 2004.

(F) THE MINISTRY OF HEALTH AND LONG-TERM CARE

Total Number of Cases Reviewed – 2004: 25

Total Number of Cases with Recommendations Related To this Topic Area: 6

1. In recognition of the invaluable role that Community Care Access Centres provide in the placement of the elderly into long term care facilities, the Ministry of Health and Long-Term Care, in cooperation with the appropriate health care associations, should review the resourcing requirements for Community Care Access Centres. When, and if, resourcing issues are identified, steps should be taken to address these issues for the purpose of maximizing the health and safety needs of the elderly.
2. The Ministry of Health and Long-Term Care, in consultation with health care professionals having the responsibility of managing elderly patients with aggressive behaviours, should take steps to ensure that Geriatric and/or Psychogeriatric Assessment teams with established referral patterns are available to all communities throughout the Province of Ontario.

Comment: This recommendation was made in two reviews in 2004.

3. The Ministry of Health and Long-Term Care, in consultation with health care professionals working in the long term care industry, should develop an aggression risk assessment tool for elderly, cognitively impaired patients with abnormal behaviours. Implicit in this recommendation is the need to identify patients who are at risk to cause injuries to themselves, other long term care facility residents, and staff.

Elderly patients who are deemed to pose a risk to others should NOT be allowed admission to a long term care facility and, if already a resident, should be immediately transferred to an alternate setting for assessment, short term, and potentially long term treatment.

Comment: This recommendation was made in three reviews in 2004.

4. It is recommended that the Ministry of Health and Long-Term Care, in consultation with representatives from the long term care industry and health care professionals, develop both a short term and long term strategy for the care and treatment of physically aggressive patients with dementia. Two principles must guide the development of this strategy:
 - a) The safety of other vulnerable residents in congregate living situations must be maximized, and
 - b) Development of new, highly specialized units and settings for this type of care should be considered.
5. The Ministry of Health and Long-Term Care and health care professionals caring for the elderly should be reminded of the importance of considering the individual preferences and pre-morbid personalities of each resident admitted to a congregate living situation such as exists in a long term care facility. Health care professionals should be reminded that not all residents will do well in this setting. The importance of recognizing these situations will assist the treating health care professionals in devising future treatment strategies for these residents.
6. The Ministry of Health and Long-Term Care, in consultation with stakeholders in the long term care industry, should review the definitions of “chronic care” and “long term care” for the purpose of developing clearer care guidelines for these levels of care. The importance of insuring that the guidelines address the care requirements and safety needs of elderly residents in long term care/chronic care facilities cannot be overemphasized.
7. The Ministry of Health and Long-Term Care should remind all complex continuing care units (chronic care hospitals) of their obligation to accept admission of elderly patients with complex care needs.

(G) THE ACUTE CARE AND LONG TERM CARE INDUSTRY

Total Numbers of Cases Reviewed – 2004: 25

Total Number of Cases with Recommendations Related
To this Topic Area: 6

1. Acute, chronic, and long term care facilities caring for the elderly need to develop clear policies and procedures identifying the scope of practice of health care professionals working within the facility. This is especially important when more than one health care professional such as a physician and a registered nurse – extended class are providing medical care to a patient.

All members of the health care team including the patient's family should have a clear understanding of the role and responsibility and limitations of each of the health care providers.

2. All hospitals providing care to the elderly should develop standardized hospital – wide protocols to address the following:
 - a) The prevention and management of constipation,
 - b) The assessment and management of a delirium, and
 - c) The assessment and management of side effects of commonly prescribed medications.
3. With the assistance of the Ministry of Health and Long-Term Care, all long term care facilities in the Province of Ontario should develop strategies to manage physically aggressive residents. Treatments considered should include non-pharmacologic and pharmacologic measures as well as modification of the environment.
4. The long term care industry, in cooperation with the Ministry of Health and Long-Term Care, should review the practice of placing physically aggressive, demented patients together in restricted spaces (such as 4 bed wards) as this may contribute to the development of further aggressive behaviour.
5. Staff working in long term care facilities in the Province of Ontario should receive ongoing training in the identification and management of elderly cognitively impaired residents with abnormal behaviours.

Comment: This recommendation was made in three reviews in 2004.

6. All long term care facilities in the Province of Ontario should develop policies and procedures to deal with the identification and management of elderly, cognitively impaired residents with abnormal behaviours.

Comment: This recommendation was made in four reviews in 2004.

7. All long term care facilities in the Province of Ontario should develop policies and procedures to manage allegations of elder abuse.

(H) THE OFFICE OF THE CHIEF CORONER

Total Number of Cases Reviewed – 2004: 25

Total Number of Cases with Recommendations Related to this Topic Area: 10

1. The Office of the Chief Coroner, in consultation with the Ministry of Health and Long-Term Care and stakeholders in the long term care industry, should develop a ways and means of obtaining health care records on living persons who have been involved in the death of another person and may pose an ongoing public safety risk to others.
2. Guidelines should be developed to assist investigators who respond to deaths of residents in long term care facilities.
3. The Office of the Chief Coroner should pursue the issue of labeling of the medication with the manufacturer.
4. The Office of the Chief Coroner should give consideration to publishing the circumstances surrounding this death in the Fifteenth Annual Report of the Geriatric/Long Term Care Review Committee to the Chief Coroner for the Province of Ontario.

Comment: This recommendation was made in six reviews in 2004.

5. The Office of the Chief Coroner should give consideration to publishing the circumstances surrounding this death in a future Annual Report of the Geriatric/Long Term Care Review Committee to the Chief Coroner for the Province of Ontario.

CASE REVIEWS

CASE #1

ISSUES

1. Communication and Documentation
2. Medical/Nursing Management
3. The Use of Drugs in the Elderly

HISTORY

This is the case of a 72 year old woman who lived in a retirement home (RH). She had a long history of mental illness which included a presumed bipolar affective disorder for which she was being followed by a psychiatrist.

In June 2001, the woman was briefly hospitalized at the general hospital (GH) with confusion and Parkinsonian symptoms and signs. Lithium toxicity was rapidly diagnosed and appropriately treated.

During the summer of 2002, the psychiatrist discontinued her Stelazine and prescribed Olanzapine. Other medications being taken at this time included Venlafaxine Hydrochloride, Carbamazepine, Lithium, and Amiloride Hydrochloride/Hydrochlorothiazide. The Committee noted that the last Lithium level was recorded in April 2002 and was reported to be 0.66 (therapeutic level <1.2).

In early November 2002, the woman's family physician diagnosed the onset of mild congestive heart failure for which Furosemide was prescribed. Shortly thereafter by mid November, the woman was noted to be unsteady on her feet and more confused.

On December 2, 2002, the woman's daughter took her mother to see her psychiatrist. The psychiatrist told the daughter that her mother had developed an organic brain syndrome and needed a medical workup. A Lithium level was not requested. The Committee could not determine if the psychiatrist was aware of the recent addition of Furosemide to the woman's medication list. The Committee wondered if the psychiatrist believed that the woman would be taken that day to the emergency room of the GH for the medical workup.

On December 5, 2002, a caregiver from the RH presented at the psychiatrist's office without an appointment to inform the psychiatrist that the woman's condition had deteriorated further with increased confusion, slurred speech, tremors, and an inability to walk. The Committee noted that these symptoms were similar to the symptoms present in the June 2001 episode of Lithium toxicity. The psychiatrist, who was the same psychiatrist involved in the June

2001 episode, once again suggested that the woman have a medical workup by the family physician or be taken to the emergency room of the GH.

At 0830 hours on December 6, 2002, the woman's daughter contacted the family physician's office and asked to speak with the family physician. He returned the call at 1500 hours. Apparently, he did not recall being advised of the psychiatrist's recommendation that an urgent medical workup should be conducted. He did suggest that the Furosemide be discontinued.

On December 7, 2002, the woman was taken to a community Urgent Care Centre where she was diagnosed to be in mild congestive heart failure. Diuretic therapy with Furosemide was restarted.

By December 9, 2002, the woman's clinical condition had further deteriorated as her speech was slurred, she was not responding well to commands, and she needed assistance to dress and eat her meals. The family physician was contacted and recommended that the dosage of Olanzapine be decreased from 7.5 mg. to 2.5 mg./day. In fact, this order was not exactly followed as no Olanzapine was given over the next few days.

By December 15, 2002, RH staff noted that the woman's clinical condition was continuing to deteriorate.

On December 16, 2002, the psychiatrist noted that a medical workup had not yet been done. He discontinued the Olanzapine, which was not being administered, and prescribed Stelazine 2 mg. in the morning and 6 mg. in the evening. He commented that the woman should be hospitalized but, as he was going away, the admission to hospital could not be arranged.

On December 17, 2002, a number of laboratory investigations were done with the following results:

1. Creatinine – 141 (normal range unknown),
2. White Blood Cell Count – 12.1,
3. Potassium – 2.5, and
4. Urinalysis – negative.

A Lithium level was not done.

On December 19, 2002, the woman was noted to be less responsive. The family physician was called at 1000 hours. When he called back at 1534 hours, he recommended that the woman should be taken to the Urgent Care Centre which was done at 1830 hours. Medical assessment revealed that the woman's clinical condition was unstable which resulted in her being transferred to the emergency room of the GH where the diagnosis of Lithium toxicity was rapidly made. Despite being admitted to the intensive care unit where she received exemplary

care, her clinical condition continued to deteriorate with death being pronounced two days later on December 21, 2002.

The death was reported to a local coroner who commenced an investigation. Death was attributed to complications of Lithium toxicity. A post mortem examination was not performed.

DISCUSSION

This is the case of a 72 year old woman who resided in a RH. She was being followed by a psychiatrist for a chronic mental illness with a presumed bipolar affective disorder which appeared to be reasonably well controlled with Lithium, Venlafaxine Hydrochloride, Stelazine, and since the summer of 2002, Olanzapine. In June 2001, the woman was briefly hospitalized with a bout of Lithium toxicity which was rapidly diagnosed and treated. The last Lithium level was recorded in April 2002. Over the next eight months up until the time of her death, routine Lithium level monitoring did not appear to be done.

The woman's medical care was provided by her family physician. When the woman developed congestive heart failure in early November 2002, diuretic therapy with Furosemide was started. Of concern to the Committee was the apparent lack of communication between the family physician and the psychiatrist as it would appear that the psychiatrist was unaware that Furosemide had been ordered. Given that the risk for the development of Lithium toxicity increases with the administration of a diuretic which causes intravascular volume depletion in the elderly, it is the Committee's opinion that direct communication of any change in the Lithiumized patient's medical condition should be directly communicated to the consultant psychiatrist.

When the woman presented to the psychiatrist in mid November 2002 with symptoms most likely due to early Lithium toxicity, the psychiatrist advised the daughter that her mother had developed an organic brain syndrome and needed a medical workup, presumably by the family physician. From the documentation submitted to the Committee for review, the Committee could not determine if the need for a medical workup was ever communicated to the family physician. Similarly, when the caregiver from the retirement home presented unannounced to the psychiatrist's office, the psychiatrist again recommended a medical workup. Again, the Committee could find no documentation to confirm that this information was communicated to the family physician.

On two occasions on December 6, 2002 and December 19, 2002, calls were placed to the family physician's office to advise of the woman's deteriorating clinical state. Of some concern to the Committee was the length of time it took for the family physician to return these calls (6 ½ hours on December 6, 2002 and 5 ½ hours on December 19, 2002). The fact that the calls were not promptly returned suggested to the Committee that the family physician and/or his office

staff may not have fully appreciated how seriously ill this elderly, delirious woman was.

When the family physician decreased the dosage of Olanzapine on December 9, 2002, it would appear that RH staff, on their own, decided to withhold the medication. If RH staff were that concerned about the woman's clinical state, it would not have been unreasonable for them to recontact the family physician to express their concerns. Communication from RH staff to the psychiatrist of this voluntary decision not to administer the Olanzapine did not appear to occur given the fact that the psychiatrist ordered the Olanzapine to be discontinued on December 16, 2002 (when it hadn't been given to the woman since December 9, 2002).

On December 16, 2002, the psychiatrist recommended that the woman be admitted to hospital, but, as he was going away, the admission could not be arranged. If the woman was sick enough to require hospitalization that day, why didn't the psychiatrist make arrangements for another physician to look after the woman until his return?

And finally, the Committee wondered if the treating health care professionals realized that Lithium is a potentially toxic medication, especially in the elderly, who frequently have multiple diseases that may affect multiple systems for which they are receiving multiple medications. In these patient's, regular monitoring of the patient's Lithium level should be mandatory.

RECOMMENDATIONS

1. The Office of the Chief Coroner should give consideration to publishing the circumstances surrounding this death in the Fifteenth Annual Report of the Geriatric/Long Term Care Review Committee to the Chief Coroner of Ontario.
2. Health care professionals should be reminded that Lithium is a potentially toxic medication, especially in the elderly, who frequently have multiple diseases that may affect multiple systems for which they are receiving multiple medications. For example, elderly patients on Lithium therapy are at increased risk to develop toxicity if diuretic therapy is required. Regular monitoring of serum Lithium levels should be mandatory.
3. Health care professionals should be reminded of the importance of TIMELY AND DIRECT communication amongst ALL members of the health care team including family members in situations where a patient's clinical condition suddenly, unexpectedly, and/or unexplainably changes, and/or when family members have expressed concerns regarding the patient's clinical course. The importance of documenting the information

communicated and with whom the communication has occurred cannot be overemphasized.

4. Given that the ill elderly frequently require the management expertise of multiple medical consultants (i.e. – psychiatrist, cardiologist, endocrinologist, respirologist), health care professionals should be reminded of the extreme importance of direct communication with the patient's primary care or most responsible physician.
5. Health care professionals should be reminded that changes in an elderly patient's clinical condition including behavioural changes may indicate the presence of a potentially serious medical illness such as a delirium. Assessment of these patients should, at a minimum, precipitate a comprehensive medical assessment including a review of the patient's past medical history and a critical review of the patient's medication profile looking for potentially treatable causes of the patient's deteriorating clinical condition.

CASE #2

ISSUES

1. Admission/Discharge/Transfer Procedures
2. Medical/Nursing Management

HISTORY

This is the case of a 91 year old woman who lived in her own home with her two adult children, a 63 year old son and a 71 year old daughter. Her husband died in 1963.

Her past medical history was extensive and included the following:

1. Blindness secondary to glaucoma,
2. Transient ischemic attacks,
3. Alzheimer's dementia,
4. Beta blocker induced asthma,
5. A remote hysterectomy,
6. Diverticulosis with blood loss,
7. Depression,
8. Osteoarthritis,
9. Premature ventricular contractions,
10. Diet controlled diabetes mellitus, and
11. Hypertension.

The family physician's office records submitted to the Committee for review spanned the time period from 1991 to her last visit in November 2000. These records also included records from a Geriatric Clinic of a community teaching hospital for visits in September 2001, January 2002, and April 2002. The diagnosis of Alzheimer's dementia was made in the Geriatric Clinic for which a trial of Donepezil Hydrochloride was prescribed. From the documentation submitted to the Committee for review, it would appear that the woman was not seen by her family physician from November 2000 until she was admitted to a licensed long term care facility (LTCF) on February 12, 2003 at which time she would have been assessed by the LTCF's physician.

Over the last 18-24 months of her life, the woman developed a significant cognitive decline and was apparently more difficult to care for. On August 22, 2002, 21 months after she had last been seen in the office, the family physician called the Community Care Access Centre (CCAC) to arrange for long term care placement.

On September 3, 2002, a nurse from the CCAC visited the home and reported the following:

“spends most of her day in bed – asleep family concerned with rapid decline in client. Increased care and decreased interaction with family. When does the client require placement? ASAP”.

Apparently, family members declined “urgent” care and requested that their mother be designated as “elective”.

On September 6, 2002, the Consent for Placement Form was forwarded to the CCAC by her family.

On September 17, 2002, the family physician faxed the Eligibility for Long Term Care Form to the CCAC which indicated that the woman needed “urgent placement”. Given that the family physician had not seen the woman since November 2000, the Committee suspected that the medical information on the form may have been obtained, in part, from the Geriatric Clinic (last visit April 2002).

The woman’s medication list included the following:

1. Enteric Coated Acetyl Salicylic Acid 325 mg. OD.,
2. Donepezil Hydrochloride 5 mg. OD.,
3. Atenolol 25 mg. OD.,
4. Olanzaprine Tartrate 2.5 mg. OD.,
5. Hydrochlorothiazide 25 mg. OD.,
6. Ferrous Fumarate 300 mg. OD.,
7. Risperidone 0.5 mg. with supper, and
8. Nifedipine 30 mg. OD.

On October 8, 2002, the CCAC deemed the woman to be eligible for placement in a LTCF. A Placement Preference Form was forwarded to the family. For reasons unknown, the Placement Preference Form, which was dated September 2002, was not processed by the CCAC until January 29, 2003, a period of almost four months. The Committee noted that the Form listed the placement option as urgent. During this time period, it would appear that no home care was provided at the request of the family.

On February 6, 2003, a CCAC case worker conducted a home visit and submitted a report indicating the presence of a crisis situation as the woman had developed extensive pressure wounds and ulcers over the coccyx, calves, and heels. Later that day, a second home visit was made by a registered nurse who confirmed the presence of the ulcers. An urgent referral was made to the Victorian Order of Nurses. Daily visits by a registered nurse commenced on February 8, 2003.

On February 12, 2003, the woman was admitted to a LTCF. On admission, nursing staff made a number of comments regarding the skin breakdown and the

severe ulcers. Over the next week, the woman's clinical condition rapidly deteriorated with death being pronounced on February 19, 2003.

The death was reported to a coroner who commenced an investigation and ordered a post mortem examination. The pathologist noted the presence of extensive skin breakdown with ulcers over the lower back, coccyx, calves, and heels. The cause of death was listed as dehydration and atherosclerotic heart disease. Although not specifically identified, the Committee wondered if ulcer related sepsis may have also been a factor in the death.

The coroner requested the jurisdictional police service to assist with the investigation. Interviews with the woman's son and daughter revealed that the woman had been bedridden since October 2002 and skin ulcerations on the calves and heels had been present for months. The family had been treating the ulcers with leg elevation and an over-the-counter antibacterial cream.

The Police Report concluded that:

"The family was somewhat ignorant in proper medical treatment and diagnosis. They were further hampered by their own elderly ages."

The Report went on to say the following:

"Based on their (CCAC) home visit, a more timely second and further follow-up visit would of (sic) prompted proper medical intervention. Medical records show 5 months between the time CCAC listed patient as needing placement ASAP and her second home visit. If this is a matter of insufficient resources, I think it is unacceptable. The seniors of our community deserve better care and dignity in their final days."

DISCUSSION

The Committee was deeply troubled by the circumstances surrounding the death of this 91 year old woman and shared the opinion voiced in the police investigator's final comments.

"If this is a matter of insufficient resources. I think it is unacceptable. The seniors of our community deserve better care and dignity in their final days."

There can be no doubt that this woman had an extensive past medical history including blindness, transient ischemic attacks, Alzheimer's dementia, atherosclerotic heart disease, diverticulosis, osteoarthritis, depression, hypertension, and diabetes mellitus. Over the last 18-24 months of her life, her

cognitive status deteriorated rapidly. Over the last 4-5 months of her life, she was bedridden and cared for by her elderly son and daughter, both of whom appeared to be very limited in their medical knowledge.

Of concern to the Committee was the apparent lack of medical supervision for the time period from November 2000 (the last recorded visit to her family physician) to February 12, 2003 when she was admitted to the LTCF. The Committee did note that the woman was seen in the Geriatric Clinic of the community teaching hospital on three occasions in September 2001, January 2002, and April 2002. The results of these visits were present in the family physician's office records.

On August 22, 2002, the family physician referred the woman to the CCAC for urgent placement in a LTCF, presumably at the request of her family.

On September 3, 2002, a nurse from the CCAC visited the home, assessed the situation, and recommended that the woman be placed in a LTCF as soon as possible. Fourteen days later on September 17, 2002, the family physician completed the Eligibility for Long Term Care Form and faxed it to the CCAC. Of concern to the Committee was the fact that the family physician completed the form presumably based on his previous knowledge of the woman whom he had last seen 21 months previously.

The CCAC accepted the woman for urgent placement on October 8, 2002 and forwarded a Placement Preference Form to the family. Four months later on January 29, 2003, the CCAC processed the Placement Preference Form. The reason for this four month delay was unknown to the Committee. While the delay, in part, may have been due to the family not completing and returning the form to the CCAC in a timely fashion, the Committee was more concerned that the delay may have occurred within the CCAC.

Of even more concern to the Committee was the fact that no one appeared to be monitoring the clinical condition of this woman who had been identified as requiring urgent placement in a LTCF. Did the CCAC assume that the woman was being medically followed by her family physician?

It is the Committee's understanding that CCACs in Ontario have a dual role including a Placement Function to time manage the case and a Supervision Function to clinically manage the client. Once a client has been accepted for placement, the file is then turned over to a case manager whose responsibility it is to manage/supervise the case until the placement has been completed. In this particular case, the woman was accepted for urgent placement on October 8, 2002. From the documentation submitted for review, the Committee was unable to determine if a case management process was put in place. Once the Placement Preference Form was processed on January 29, 2003, the CCAC conducted a further assessment following which, the placement occurred quickly.

In the letter of referral to the Committee, the Regional Supervising Coroner advised that the CCAC had indicated that “placement only” cases had a routine follow up visit at 6 months. Given that the initial CCAC assessment on September 3, 2003 recommended that the woman be placed in a long term care facility as soon as possible and that the CCAC accepted the woman for urgent placement on October 8, 2002, the Committee had some difficulty in understanding why the CCAC classified this woman as a “placement only” case. Presumably this designation was made as the woman’s family declined an urgent placement. Following the death, the CCAC advised the Regional Supervising Coroner that “placement only” cases would now be routinely followed up in 3 months. In addition, these cases would now be supervised by a case manager and the circumstances surrounding this death would be used for teaching purposes. The Committee would also like to point out that the term “placement only” may be misleading to health care professionals working in CCACs as the term would tend to imply that the elderly client only needs placement and has no other clinical needs. In the Committee’s opinion, this is anything but the case given that the elderly frequently have multiple diseases that affect multiple systems, any of which can deteriorate quickly. It is for this very reason that the placement process should be viewed as a process and not an isolated event.

The final issue, and perhaps the most important the Committee wanted to comment on, related to the statement made by the police investigator wherein he alluded to the possibility that insufficient resources within the CCAC industry may have played a role in this death. If, in fact, there is a resourcing issue within the CCAC industry in Ontario, this needs to be identified and addressed in order to prevent a future death in similar circumstances and protect one of the most vulnerable segments of our society, the frail elderly.

RECOMMENDATIONS

1. The Office of the Chief Coroner should give consideration to publishing the circumstances surrounding this death in the Fifteenth Annual Report of the Geriatric/Long Term Care Review Committee to the Chief Coroner of the Province of Ontario.
2. Health care professionals caring for the elderly should be reminded of the importance of providing comprehensive, ongoing, regular care for their ill, frail elderly patients. When these patients are no longer able to attend in the office setting, provisions to arrange for medical supervision in the community should be arranged.
3. Health care professionals caring for the elderly should be reminded of the importance of conducting a thorough and current assessment at the time of completing the application for placement in a long term care facility.

4. In recognition of the valuable role that Community Care Access Centres provide in the placement of the elderly into long term care facilities, the Ministry of Health and Long-Term Care, in cooperation with the appropriate health care associations, should review the resourcing requirements for the Community Care Access Centres. When, and if, resourcing issues are identified, steps should be taken to address these issues for the purpose of maximizing the health and safety needs of the elderly.
5. Health care professionals caring for the elderly and especially health care professionals working in Community Care Access Centres should be reminded that the long term placement process is a process and not an event. The importance of managing the total patient including both the medical and placement needs cannot be overemphasized.

Once an elderly patient has been accepted for placement by the Community Care Access Centre, the importance of clearly designating who is responsible for the elderly patient's primary care cannot be overemphasized.

Placement applications judged as urgent by the referring physician/agency/Community Care Access Centre should be processed in a manner that takes the urgent status into consideration.

Once a referral has been accepted by the Community Care Access Centre, an appropriate monitoring protocol with clearly defined timelines, should be initiated relevant to the clinical and safety needs of the elderly client.

CASE #3

ISSUE

1. The Use of Drugs in the Elderly

HISTORY

This is the case of a 90 year old woman who, at age 87 years, was admitted to a long term care facility (LTCF) on August 4, 2000 from another institution. In May of 2000, she had originally been accepted for admission to the LTCF but a bed was not available at that time.

Her admission diagnoses included the following:

1. Alzheimer's disease of three years duration with a MMSE score of 15/30,
2. Atherosclerotic coronary artery disease,
3. Chronic dyspepsia,
4. Diverticulosis,
5. Hypertension,
6. Osteoarthritis, and
7. A fractured right hip in May of 2000 which the Committee suspected was the trigger for the admission to the LTCF.

This woman's stay at the LTCF from August 2000 until July 23, 2003 appeared to be relatively uneventful. Her medical conditions remained stable and her abnormal behaviours were appropriately managed.

During the first week of July 2003, the woman developed a productive cough for which antibiotics were prescribed. When the woman developed diarrhea which was not an uncommon occurrence for her, a stool specimen was sent for C. difficile. The result of this test was not in the documentation submitted for review.

During the day of July 22, 2003, nursing staff noted that the woman was lethargic but was able to drink fluids and propel herself in her wheelchair. That evening, abnormal chest findings were detected which resulted in a different antibiotic being prescribed.

On the morning of July 23, 2003, it would appear that her 0800 hours medications were administered at approximately 1130 hours. Unfortunately, the medications administered were those of another resident. The medications included:

1. Hydrochlorothiazide/Lisinopril – a combination diuretic/angiotension converting enzyme inhibitor,
2. Citalopram Hydrobromide – an antidepressant,

3. Glyburide – an oral hypoglycemic,
4. Metformin Hydrochloride – an antihyperglycemic agent, and
5. Levodopa – an antiparkinson agent.

Within 20 minutes, nursing staff noted that the woman was unresponsive and diaphoretic with laboured respirations and an unobtainable blood pressure. Nursing staff notified the physician and the woman's daughter. Transfer to the emergency room of the general hospital (GH) was arranged.

In the emergency room, laboratory investigations revealed a blood sugar of 10.9 and an adequate oxygen saturation. Naloxone Hydrochloride was administered without effect. The initial diagnosis was considered to be a cerebrovascular accident (stroke). It would appear that the hospital based health care professionals were unaware that the woman had been administered another resident's medications. Later that evening, LTCF nursing staff recognized the medication error and notified the hospital. This resulted in the commencement of more aggressive therapy. There was no improvement in the woman's clinical condition.

On July 31, 2003, palliative care was instituted. The woman's condition continued to deteriorate with death being pronounced on August 2, 2003.

The death was reported to a coroner who commenced an investigation and ordered a post mortem examination which demonstrated the presence of the following:

1. A large, organizing pulmonary thromboembolism of the left lung,
2. Thrombus formation in the right pelvic veins,
3. Bilateral bronchopneumonia,
4. Severe right coronary artery atherosclerosis with a plaque hemorrhage,
5. An old, extensive posteroseptal myocardial infarction with recent ischemic changes,
6. Moderate atherosclerosis of the circumflex and right coronary arteries,
7. Calcification and fibrosis of the mitral and aortic valves consistent with rheumatic changes,
8. Arterionephrosclerosis,
9. Very recent, bilateral hemorrhagic occipital lobe infarctions, and
10. Microscopic evidence suggestive of the presence of Alzheimer's disease.

The Committee noted that the LTCF Director of Care met with the woman's daughter on July 29, 2003, 3 days prior to the death, to inform her of the medication error and to advise that the LTCF had reported the error to the Ministry of Health and Long-Term Care (MOHLTC).

Following the death, the LTCF completed and filed an "Unusual Occurrence Report" with the MOHLTC. Corrective actions taken by the LTCF in an effort to prevent a future similar occurrence included the following:

1. A "critical indicator investigation" was completed for quality assurance purposes.
2. The individual LTCF staff member was required to review and acknowledge the error and to write about the experience and steps to be taken to prevent a recurrence.
3. An "inservice" on medication administration practices was given to LTCF staff on August 5, 2003.
4. The incident was further reviewed at the Medical Advisory Committee Meeting and Nurse Quality Meeting in September 2003.

DISCUSSION

This is the case of a 90 year old woman who resided in a LTCF from August 4, 2000 to July 23, 2003. She had a number of chronic medical conditions which appeared to be appropriately managed throughout her stay.

On the morning of July 23, 2003, LTCF nursing staff unfortunately administered a number of medications to the woman, medications that were to have been given to another resident. Within 20 minutes, the woman became unresponsive which resulted in her being transferred to the emergency room of the local general hospital. Of concern to the Committee was the fact that the medication error was not identified by LTCF nursing staff for approximately 8 hours. Once the medication error was recognized, the hospital was advised. The woman's condition never improved with death occurring 9 days later. Given the temporal nature of the collapse in relation to the administration of the wrong medications, the Committee agreed with the investigating coroner that the medication error was a contributing factor to the woman's death.

In response to the death, the LTCF, in cooperation with the Ministry of Health and Long-Term Care, conducted an internal investigation which resulted in the implementation of a number of strategies designed to prevent a future death in similar circumstances.

RECOMMENDATIONS

1. The Office of the Chief Coroner should give consideration to publishing the circumstances surrounding this death in the Fifteenth Annual Report of the Geriatric/Long Term Care Review Committee to the Chief Coroner for the Province of Ontario.

2. Health care professionals should be reminded of the five “Rs” of medication administration. The Right dosage of the Right medication must be given to the Right patient by the Right route of administration for the Right reason!
3. The licensed long term care facility should arrange for an independent, external review of the facility’s medication administration procedures. Ideally, the review should be conducted by a nursing health care professional and a pharmacist with extensive experience caring for the elderly in the long term care setting.

CASE #4

ISSUES

1. Medical and Nursing Management
2. Communication and Documentation

HISTORY

This is the case of an 89 year old woman who lived alone in the community with significant support from her family. Her past medical history included the following:

1. Mild cognitive impairment,
2. Hypertension,
3. Gait impairment with a history of falls, and
4. A left hip arthroplasty in 1993 which resulted in a shortening of her left leg.

The only medication she was taking regularly was a Calcium supplement.

On March 28, 2003, the woman was brought by ambulance to the emergency room (ER) of the general hospital (GH). She had been found on the floor under her bed. She had been last seen by her daughter on March 25, 2003. On the Ambulance Transfer Report, it was noted that she had a large pressure ulcer over the coccygeal area. Physical examination in the ER revealed the presence of left sided weakness. She was non-verbal but would open her eyes in response to pain. Her plantar response was up-going on the left and equivocal on the right. She was markedly dehydrated. CT scanning of the head demonstrated the presence of a large acute hemorrhage in the right cerebral cortex centred in the right frontal lobe. The hemorrhage was involving deep subcortical structures with surrounding edema and mass effect.

Initial management in the ER included IV rehydration and IV Gatifloxacin. Laboratory investigations included the following:

1. Urine and blood cultures – negative,
2. White blood cell count – 17.5 reduced to 16.8 the following day,
3. Absolute neutrophil count – 16.5 reduced to 14.4 the following day,
4. Electrolytes – normal,
5. Anion gap – slightly elevated at 15,
6. Urea – 13.4,
7. Creatinine – 59,
8. CK – elevated at 599 with a negative Troponin,
9. AST – elevated at 105,
10. Alkaline phosphatase – 156,
11. TSH – normal, and

12. Cultures for VRE and MRSA – negative.

A nasogastric tube was placed for interim nutritional feeding until a swallowing assessment could be performed by a speech language pathologist (SLP).

The woman was admitted to a medical floor with the diagnosis of a right intracerebral hemorrhage.

On March 31, 2003, the SLP's assessment concluded that the woman had a moderate to severe dysphagia. It was recommended that the woman would require frequent cueing to remember to swallow and that a thickened, pureed diet was to be given. Oral medications were to be crushed and rigorous oral hygiene was to be done.

On April 2, 2003, a clinical nutrition assessment was done to assess the woman's "NG tube assessment/dietary needs". The report noted "NG tube cancelled – on dysphagia diet – eating fair amounts". She was still coughing when given water but was able to tolerate thickened fluids. The feeding plan included the following:

1. Continuing with a pureed diet and thickened fluids,
2. Adding Nutrasure pudding daily,
3. Giving thickened juice with each meal,
4. Monitoring her intake, and
5. Having a SLP reassessment (done on April 17, 2003).

When the woman was admitted on March 28, 2003, the presence of a sacral ulcer was noted both by the ambulance personnel and the GH health care professionals. Initial therapy included cleansing with normal saline and the application of an Opsite dressing. Progress notes referring to the sacral ulcer were recorded on March 29 and 30, 2003.

On March 30, 2003, the ulcer was noted to be 4 centimeters in diameter with a small amount of purulent, sanguinous drainage and an area of "black tissue". Hydrocolloid gel was applied under a new dressing.

On April 2, 2003, the ulcer was noted to be draining in a similar fashion at the time of the dressing change. The GH's skin care nursing specialist was asked to assess the woman's sacral ulcer. Due to the GH's SARS restrictions and the skin care nursing specialist's pregnancy, this assessment could not be performed. The Committee noted that the sacral ulcer was managed by registered nursing staff every 3-4 days.

On April 8, 2003, the attending physician surgically debrided the ulcer.

On April 11, 2003, the social worker recorded that she had a telephone conversation with the woman's daughter on the previous day. Future plans for her mother were discussed. It was decided to apply for slow stream rehabilitation as the next step.

On April 4, 2003, the woman's level of consciousness was noted to be decreased. A repeat CT scan of the head was done on April 15, 2003 and reported on the following day to show a mass deep in the right hemisphere with bleeding and the possible presence of a glioma. The attending physician reported the findings to the family and inquired into their wishes concerning cardiopulmonary resuscitation (CPR). The family was unable to make a decision at that point in time. Several hours later, the physician gave a verbal order making the woman "palliative" and that no CPR was to be performed. Clinically, the woman remained unresponsive and unable to swallow.

A neurologist assessed the woman's decreased level of consciousness on April 16, 2003 and noted the presence of left sided, focal motor seizures which were most likely due to a resolving hematoma plus or minus a delirium. It was speculated that the sacral ulcer might be a possible source for the delirium. Phenytoin Sodium was prescribed to control the seizures. A delirium laboratory work up revealed the following:

1. White blood cell count – 8.4,
2. Absolute neutrophil count – 6,
3. Electrolytes – normal,
4. Blood sugar – normal,
5. Magnesium – normal,
6. Phosphorus – normal,
7. Albumin – decreased at 22, and
8. Adjusted calcium – normal.

During a swallowing reassessment on April 17, 2003, the woman coughed after being given 2 teaspoons of water. On a second attempt 90 minutes later, she tolerated 12 teaspoons of water without coughing and only had to clear her throat on 2 occasions. Because the woman was requesting tea, the SLP allowed her to have unsweetened black tea by spoon between meals.

Following a multidisciplinary assessment which confirmed that the woman was an inappropriate candidate for rehabilitation, transfer to a medical intermediate care unit (MICU) within the GH was arranged. On admission to the MICU, the attending physician noted that "the prognosis is poor due to immobility,

dysphagia, and cognitive impairment. Will explore options with family, home versus institutional care, palliation versus general medical care”.

On April 21, 2003, the social worker recorded a note that the woman had a telephone conversation with the woman’s daughter during which the daughter requested that an application be made for both long term care and chronic care in an alternate city to be closer to her family.

On April 22, 2003, the dietician noted that she was on a pureed dysphagia diet with sips of water and black tea. A modified barium swallow had been ordered but not yet done. A continuous subcutaneous infusion (CSCI) was in place in an attempt to maintain hydration as the woman’s oral intake was felt to be insufficient. Discussion with the daughter confirmed the daughter’s concern that her mother was eating poorly and would only allow minimal oral feeding. The dietician believed that the woman’s nutritional requirements were increased because of the stress of the sacral ulcer and that nursing staff were unable to increase her energy and protein intake. The dietician suggested that an alternate mode of nutritional support might be required and that she was going to facilitate the modified barium swallow which was completed on April 23, 2003.

On April 24, 2003, the SLP noted that the woman did not aspirate on any of the textures tested. It was recommended that the pureed diet be continued. As the woman was frequently drowsy, thin clear fluids and black tea were only to be given when she was alert. If the woman was drowsy, only thickened fluids were to be given.

At the same time, nursing notes indicated that the sacral ulcer was draining a foul smelling sero-purulent discharge. The ulcer was packed with Purosalt and covered with a dressing. The Committee could not determine from the notes if this was a change from before. The physician assessed the woman for an oral temperature of 37.5 C – 38.1 C. A urine for culture and sensitivity was obtained.

On April 25, 2003, nursing staff noted that the woman was lethargic. The attending physician wondered if the lethargy was due to a postictal state.

On April 26, 2003, the woman was much more alert and ate three quarters of her breakfast.

On April 28, 2003, nursing staff noted the presence of some redness around the CSCI site. The attending physician was advised and ordered the CSCI to be discontinued.

On April 29, 2003, the dietician noted that the woman was “eating better” and had taken her breakfast in full. Also noted was the fact that the woman was complaining of the painful ulcer on her sacrum.

With regards to the issue of pain, the Committee noted the absence of any documentation of discomfort until April 25, 2003 when Acetaminophen was requested for “generalized pain”.

With regards to the issue of placement, the social worker recorded a note on May 1, 2003 documenting a conversation with an individual at the complex continuing care facility in the city requested by the daughter. The individual advised the social worker that “chronic care facilities in this city do not have funding for wound care long term care facilities have been given the funding for wound care”. It was also stated that LTCFs in that city could manage patients with intravenous and continuous subcutaneous infusions.

Information on the woman’s skin and wound care was provided to the LTCF by the CCAC. On April 20, 2003, the sacral ulcer was documented as 10 x 8 x 1 centimeters in size and was classified as “Stage 3”. Arrows indicated that this was unchanged on April 29, 2003. The physician’s note of April 17, 2003 forwarded to the LTCF included documentation of the presence of the sacral ulcer. A “revised copy” of the Functional Assessment Form documented the presence of the ulcer and suggested referring to the skin and wound sheet. The patient was noted to be “totally dependent” in her ability to eat and required a modified pureed diet. Documentation also indicated that she was on CSCI at 50 cc./hour.

On April 23, 2003, the Inter-PCS Referral Form (Placement Coordination Service) from the CCAC PCS indicated that the woman required “total care”.

On May 2, 2003, the woman was transferred to the LTCF. Nursing staff noted that she was cachectic, had a large decubitus ulcer over her coccygeal area, and had a left hemiplegia due to her right sided hemorrhagic stroke. Her daughter requested that care be provided only in the LTCF and consented to a DNR order.

LTCF Intake and Output records indicated that the woman took very little orally, often only a few teaspoons of fluid per day. Her urine output ranged from 150-300 ml./day. Appropriate comfort measures including Morphine Sulfate were provided.

On May 12, 2003, the woman was pronounced deceased. The Medical Certificate of Death listed the immediate cause of death as hemorrhagic stroke with decubitus ulcer on the coccyx as a significant factor.

The investigating coroner identified the following concerns relating to the circumstances surrounding the woman's death:

1. The SARS crisis visitation restrictions for family members and other visitors deprived the patient of vital support, stimulation, and care that had been previously provided by family members.
2. The SARS crisis may have contributed to a premature discharge to the LTCF.
3. The apparent refusal of a chronic care facility to accept admission of the woman.
4. The misrepresentation by the CCAC to the LTCF of the woman's clinical status and treatment requirements.
5. Inadequate management of the woman's sacral ulcer by the health care professionals in the GH including:
 - a) Delayed recognition of the severity of the sacral ulcer,
 - b) Delayed utilization of a special mattress,
 - c) Delayed assessment by a registered nurse wound care specialist,
 - d) The fact that a swab for culture and sensitivity was not taken from the sacral ulcer prior to the initiation of antibiotic therapy,
 - e) The fact that further aggressive anti-ulcer therapy was not instituted in the face of the presence of fever and a purulent discharge.
6. Failure to meet and maintain basic nutritional needs let alone nutritional needs required for adequate wound healing.
7. Inadequate and inaccurate assessment of the woman for fitness to transfer as she was not eating well, was febrile, had prior pain control, and had an untreated, infected ulcer.

Prior to the transfer of the woman from the GH to the LTCF, the LTCF requested confirmation from the CCAC that the woman:

1. Was stable for discharge,
2. Had a sacral ulcer that was Stage 2 and was 2-3 centimeters in diameter,
3. Had a sacral ulcer that required saline packing with a dressing change once a day which required 5 minutes of care, and
4. Was on a pureed diet.

It would appear that these LTCF requirements were confirmed by the CCAC which resulted in the LTCF accepting the transfer on May 1, 2003. The transfer occurred on May 2, 2003.

On admission to the LTCF, staff were dismayed when presented with a woman who was febrile and in a poor nutritional state. Family members informed LTCF staff that their mother had been receiving CSCI up to 2 days prior to the transfer.

LTCF staff noted that the woman's sacral ulcer was 5 x 5 centimeters in size with tunneling towards the base of the ulcer of 6 centimeters at its deepest point, and 3.5 centimeters deep centrally. Also noted was the presence of a pale green, sanguinous, foul smelling discharge. LTCF staff classified the ulcer as a Stage 4 ulcer requiring approximately 40 minutes of care daily. Not unexpectedly, the LTCF staff Resident Care Coordinator expressed serious concerns about the discrepancy between the woman's care needs as reported by the CCAC versus the actual care needs identified on admission.

It would appear that the GH prepared a detailed response to the concerns identified by the investigating coroner. The GH convened a group of health care professionals to critically analyze the events leading up to and including the transfer to the LTCF. The purpose of the review was to identify any opportunities to prevent a similar situation from occurring in the future.

DISCUSSION

Having reviewed the documentation submitted for review, the Committee wanted to comment on 4 areas including:

1. The care provided to the woman in the GH during the SARS outbreak,
2. The clinical care provided in the GH relating to:
 - a) nutrition,
 - b) wound management,
 - c) communication, and
 - d) pain control,
3. Transfer issues, and
4. Response from the GH to the investigating coroner's concerns.

1. The Care Provided to the Woman in the GH During the SARS outbreak

The Committee recognized that this was an extremely challenging time for health care professionals in the Province of Ontario. The Committee agreed that the needs of individual patients to receive the comfort and support of family members needed to be delicately balanced with the need to prevent the potential and very real public health risk of allowing the spread of SARS throughout the Province. Having reviewed the documentation submitted for review, the Committee was impressed that the GH's support for this patient and her family was entirely reasonable. The GH provided additional personnel to provide additional care and support for patients in the absence of the presence of family members. In the Committee's opinion, there was no evidence to suggest that the presence of the SARS outbreak contributed to a premature discharge to the LTCF. The fact that the registered nurse with skin care expertise was unable

to provide care to the woman was, in the Committee's mind, not a factor in her death. In fact, the documentation submitted for review suggested that the GH health care professionals appeared to have reasonable knowledge and care skills to provide for the woman's skin ulcer care needs.

2. The Clinical Care Provided in the GH

a) Nutrition

There can be no doubt that this woman had swallowing impairment which compromised her nutritional status following her hemorrhagic stroke. GH staff clearly documented their attempts to meet the woman's nutritional needs and balance her need for comfort (desire for tea) versus her risk for aspiration. The expertise of both a dietician and a SLP was utilized in her ongoing care. The Committee wondered if the regular monitoring of the woman's weight might have impacted on the care provided in the GH. The Committee noted the absence of any documentation commenting on the implementation of enteral feedings. While the use of enteral feedings is a complex issue with clearly recognized risks and questionable benefits (see Reference 1), the Committee would have preferred to have seen documentation confirming that this issue had been discussed with family members.

b) Wound Management

The presence of the sacral ulcer was immediately identified by the ambulance personnel and the ER health care professionals. Thereafter, appropriate therapy with cleansings and protective dressings were regularly applied. Eventually, surgical debridement was performed. The Committee noted that the treatments were clearly documented in the medical record. In the Committee's experience, there is limited to no value in obtaining wound cultures to direct therapeutic interventions. The nursing unit did utilize low pressure mattresses. Whether or not ultra-low pressure mattresses would have helped is debatable. The evidence to support the use of ultra-low pressure mattresses is of low quality (see Reference 2). In addition, documentation by exception supported the regular turning of the woman by nursing staff every 2 hours.

c) Communication

The Committee noted the presence of many progress notes in the medical record supporting the fact that there was regular contact with family members at critical junctures in the woman's clinical course. It would have been helpful to the Committee if the GH health care professionals had recorded more extensive

notes to support the notion that family members were aware of the palliative nature of the care provided on the nursing unit.

d) Pain Control

On the Intervention Flow Sheets, there was daily documentation relating to multiple symptoms including pain management. The Committee noted that, although documentation in the Multidisciplinary Progress Notes suggested that the woman had discomfort on certain dates, the Intervention Flow Sheets on those dates revealed nothing other than “meets expected outcome” or “status unchanged from previous note”. When pain was identified in the progress notes, the prescribed analgesic was administered. The Committee believes that “Documentation by Exception” charting should be consistent with “Incidental Charting”.

The Committee had some difficulty understanding the discrepancy between the mild pain noted in the GH and the significant pain requiring narcotic analgesia on admission to the LTCF.

Following the death, the GH reviewed and revised their protocol for wound management to highlight the importance of pain control. The Committee was impressed with the GH’s response to this issue.

3. Transfer Issues

The Committee was troubled by the fact that this woman was discouraged from being admitted to the complex continuing care facility. Given her complex nutritional care needs, dysphagia, wound care needs, and her general medical and nursing care needs, the Committee believed that admission to the complex continuing care facility was entirely appropriate. Her care needs certainly exceeded what could be provided in a LTCF. The Committee had difficulty understanding why the individual from the complex continuing care facility advised the GH’s social worker that “chronic care facilities in this city do not have funding for wound care ... long term care facilities have been given the fundings for wound care”. In the Committee’s experience, complex continuing care facilities throughout the Province of Ontario are funded to provide higher levels of care than are LTCFs.

The LTCF voiced the strong opinion that the woman’s clinical status and care needs was misrepresented to them by the CCAC. In the documentation submitted for review, the Committee noted that there were multiple discrepancies between the GH’s and CCAC’s assessment of her care needs versus the LTCF’s assessment of her care needs on admission.

For example, the attending physician's admission note to the GH's alternate level of care unit (ALC) clearly indicated that the woman had a "guarded prognosis".

Yet on the final, handwritten physician note, no mention was made of this guarded prognosis. Similarly, the social worker transfer note and the brief nursing transfer note forwarded to the LTCF made no mention of the guarded prognosis. In addition, none of the transfer notes forwarded to the LTCF made any mention of the pain being experienced by the woman.

The Committee could not find a nursing discharge summary in the GH records, the LTCF records, or the CCAC records submitted for review.

The dictated, final GH physician summary indicated that, on May 1, 2003, the woman was "more alert on 26 April and fairly communicative on April 27th". She remained fairly stable for the latter part of her hospital stay with increasing facility with meals and communication needs. She appears to be clearly in need of long term care". This opinion was in opposition to the Revised Functional Assessment which indicated that the woman required "total care".

The discharge/transfer summary clearly identified the presence of the sacral ulcer. On April 29, 2003, the Skin Assessment Form described the ulcer as 8 x 10 cm. and Stage 3. In the Committee's opinion, it would have been extremely difficult for the receiving LTCF to accurately judge the level of nursing and medical care required from the information provided.

4. Response From the General Hospital

The investigating coroner made a number of recommendations to the GH in an effort to maximize the care and safety needs of elderly patients and prevent a future death in similar circumstances. The GH assembled a multidisciplinary review team to address these recommendations. The Committee was impressed with the GH's commitment to provide quality care to its patients.

RECOMMENDATIONS

1. The Office of the Chief Coroner should give consideration to publishing the circumstances surrounding this death in the Fifteenth Annual Report of the Geriatric/Long Term Care Review Committee to the Chief Coroner for the Province of Ontario.
2. The Ministry of Health and Long-Term Care in consultation with stakeholders in the long term care industry should review the definitions of "chronic care" and "long term care" for the purpose of developing clearer

care guidelines for these levels of care. The importance of insuring that the guidelines address the care requirements and safety needs of elderly residents in long term care/chronic care facilities cannot be overemphasized.

3. Health care professionals should be reminded of the importance of ensuring that “documentation by exception” charting is consistent with “incidental charting”.
4. Health care professionals involved in the hospital discharge planning and the community placement process should be reminded of the importance of insuring that the care and safety needs of their elderly clients are accurately documented and communicated to the receiving institution. Discharging an elderly client with complex care needs to a long term care institution that is neither staffed nor resourced to care for heavy care residents is a practice that should be discouraged.
5. The Ministry of Health and Long-Term Care should remind all complex continuing care units (chronic care hospitals) of their obligation to accept admission of elderly patients with complex care needs.

REFERENCES

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2. Cullum N, McInnes, E, Bell-Syer SEM, Legood R, Support Surfaces for Pressure Ulceration. The Cochrane Database of Systemic Reviews (4) 2004.

CASE #5

ISSUES

1. Medical/Nursing Management
2. Admission/Discharge/Transfer Procedures

HISTORY

This is the case of an 80 year old woman who had an extensive and complex past medical history. Her diagnoses included:

1. Hypertension,
2. Insulin dependent type II diabetes mellitus,
3. Morbid obesity,
4. Chronic renal insufficiency,
5. Chronic anemia,
6. Gout,
7. Osteoarthritis, and
8. Hypothyroidism.

Her previous surgical history included the following:

1. Tonsillectomy,
2. Appendectomy,
3. Cholecystectomy,
4. Hemorrhoidectomy,
5. Hysterectomy,
6. Cataract surgery, and
7. Bilateral knee surgeries (replacements ?).

On December 30, 2001, the woman was admitted to the GH with bilateral humeral fractures. On January 4, 2002, she had an intramedullary nailing of the left humerus and a closed reduction of the right humerus. After a short postoperative stay, she was transferred to a rehabilitation facility. On February 6, 2002, she was discharged into the care of her family.

Despite the provision of community supports, the woman's care needs were such that her son was unable to cope. An urgent placement in a LTCF was arranged. According to the documentation submitted for review, the placement was to be a temporary placement while other options were pursued. These other placement alternatives were unknown to the Committee.

On March 28, 2002, the woman was admitted to the LTCF. Medications being taken at the time of admission included the following:

1. Acetaminophen with Codeine 15 mg. two tablets po. qid. prn.,
2. Allopurinol 200 mg. po. OD.,
3. Atenolol 100 mg. po. OD.,
4. Furosemide 40 mg. po. OD.,
5. Levothyroxine Sodium 0.175 mg. po. OD.,
6. NPH Insulin 30 units sc. QAM.,
7. NPH Insulin 10 units sc. Q 1630 hrs.,
8. Risperidone 0.5 mg. po. QAM.,
9. Risperidone 1.0 mg. po. qhs.,
10. Domperidone Maleate 10 mg. po. qid.,
11. Lactulose 60 cc. po. tid., and
12. Trazodone Hydrochloride 25 mg. po. qhs.

The nursing assessment of the woman's care needs revealed that the woman:

1. Was incontinent of urine and occasionally incontinent of bowel which necessitated the wearing of a diaper at all times,
2. Required 1-2 person(s) to assist with transfers as she was 5'1" tall and weighed 259 lbs.,
3. Had upper extremity weakness,
4. Exhibited unsafe behaviour and poor judgment in that she continued attempting to do things such as transfers by herself,
5. Was able to use a walker with supervision,
6. Spent most of her time in a wheelchair,
7. Was not impaired in her communication skills, and
8. Was frequently agitated and called out for staff.

The Committee noted that the woman's son and daughter were regularly involved in their mother's care as there was daily contact with one or the other.

The attending physician recorded an admission history and physical examination. In April 2002, an "Advance Directive" was signed off by the physician.

In November 2002, a Resident Care Conference was held at which time the woman's care plan was reviewed.

Every three months, the physician reviewed the computerized patient medication record. The Committee noted that there were 2 physicians who provided concurrent care for the woman, both of whom would sign off for each other for

verbal orders. The Committee noted the presence of 4 brief medical progress notes in the documentation submitted for review dated October 23, 2002, January 21, 2003, April 23, 2003, and October 12, 2003. The physician conducted and recorded an annual medical reassessment in March 2003.

The Committee noted that the progress notes appeared to be somewhat fragmented. Most of the notes were recorded by registered practical nurses (RPNs), rehabilitation staff, and a registered nurse – extended class (RN-EC). Many of the orders were given by the RN-EC especially for skin care and topical agents. Separate progress notes were recorded by the occupational therapist (OT) and the recreation therapist (RT). The Committee noted the absence of progress notes for the time periods of March 28, 2002 to June 27 2002 and August 2002 to October 2002. Documentation of direct discussions with the woman's family regarding care plans and a family conference were not present in the records submitted for review.

Medically, the woman had ongoing problems with the following:

1. Chronic anemia with her hemoglobin ranging from 90 to 115,
2. Renal insufficiency with a creatinine ranging from 98 to 158,
3. Recurrent urinary tract infections which were treated with antibiotics in the spring of 2003 and September 2003, and
4. Relatively well controlled diabetes mellitus with blood sugars ranging from 6 to 10 and occasionally up to 14. Her Hgb A1C remained below 0.07 throughout her stay in the LTCF.

Not unexpectedly, the woman's care needs increased while in the LTCF. For the majority of her stay, her skin integrity appeared to remain intact except during the fall of 2003 when she developed cutaneous ulcerations over her coccyx and behind her left knee.

Behaviourally, LTCF staff noted that the woman had difficulty communicating and was very demanding. She would frequently call out and push the call bell for assistance. She would become upset when care was provided to others before her.

With infections, her overall clinical status fluctuated as she would become less responsive and required much more assistance with her activities of daily living. These changes were especially noted when she developed urinary tract infections (UTI). When she developed an UTI on September 21, 2003, nursing staff documented the presence of a fever, a decreased level of consciousness, and dysphagia.

Despite appropriate treatment interventions, her care needs gradually increased. She required the assistance of two persons for transfers and became totally dependent, even for feedings. She was noted to be more lethargic and would slump over while in her wheelchair.

Over the last few months of her stay in the LTCF, a mechanical lifting device was required for transfers. This was upsetting to the woman. Progress notes indicated that family members provided "physical assistance or social support at least daily".

On October 3, 2003, the woman tried to get out of her bed and became wedged between the bed and the wheelchair. LTCF staff responded, noted the absence of any injuries, and that the woman told them that she couldn't wait and "I have to come first". The woman frequently insisted on calling her son and indicated that her son would contact a lawyer.

On October 4, 2004, nursing staff noted that the woman was lethargic and tired.

On October 10, 2003, the woman complained of abdominal pain. Later that evening, she was noted to be very agitated. She asked to call her son to insist that she wanted to go home. Later that day, she "voided large x 2".

On October 11, 2003, the woman was noted to be lethargic but responsive and was afebrile. Nursing staff noted that she denied being in discomfort and was noted to be drinking and eating well. That evening, nursing staff noted that she was "very lethargic and unresponsive when spoken to during her care".

On the morning of October 12, 2003, the nursing note indicated that the "lethargy cont's". The attending physician was notified. The physician assessed the woman and recorded the following note: "As has happened before, (name) is at least socially responsive reacts to touch, does not respond to questions ... R/O UTI".

On October 13, 2003, nursing notes recorded that the woman was refusing solids and liquids, had a distended abdomen, and had only voided a small amount. Her medications were administered in a crushed state. Nursing notes indicated that her son expressed concern that his mother may have had a bowel obstruction as she had a bowel obstruction in the past. Nursing notes indicated that the woman had a "small BM on the 11th, lg. 12h, lg. 13th".

On October 14, 2003, nursing notes recorded that her son insisted that his mother had had a stroke, that she was in pain, and that her swallowing was impaired. It would appear that nursing staff reassured the son. That afternoon,

nursing notes indicated that the physician called after he had been contacted by the woman's daughter.

The note stated that: "He (the physician) stated that if family wished, (name) could be sent to the emergency dept."

On October 15, 2003, the RN-EC examined the woman and noted the following:

1. B.P. – 148/84,
2. P. – 84,
3. Abdomen – soft to touch except for area above the umbilicus which was noted to be a "hard round area the size of a cereal bowl".

The woman was noted to have passed a large soft bowel movement with a liquid stool component. The physician was notified and requested that the family be asked if the woman should be sent to the emergency room of the GH or wait until he could assess her later that afternoon. When presented this option, the family elected to have their mother sent to the emergency room.

Between September 21, 2003 when an order for Ciprofloxacin was given and October 15, 2003 when an order for blood work was given, there were no physician orders recorded. As previously noted, the only physician progress note was written on October 12, 2003 during this time period.

The final note from the GH indicated that the woman was admitted on October 15, 2003 with a decreased level of consciousness. In the emergency room, she was found to be in urinary retention and 1.6 litres of urine was removed. Her creatinine was elevated at 315. The diagnosis of an urinary tract infection was made with her urine culture positive for Enterococcus sp. There was no evidence of a generalized sepsis. Antibiotics were started which resulted in the development of a Clostridium difficile infection. When oral Metronidazole therapy was deemed to be ineffective, the route of administration was changed to IV and Vancomycin was added.

The woman's clinical condition deteriorated. She developed a protein wasting enteropathy with gross total body edema. She had ongoing intravascular volume depletion, poor urinary output, and progressive renal failure. IV Albumin was administered with minimal effect. Eventually she became anuric and hypotensive. Following a discussion with the woman's family, the decision was made to provide palliative measures only. Death was pronounced on November 21, 2003. The family declined a post mortem examination.

DISCUSSION

This is the case of an 80 year old woman who had an extensive and complex past medical history. On March 28, 2002, she was admitted to the LTCF. The admission nursing assessment identified her many heavy care needs, care needs that were complicated by her weight, diabetes mellitus, skin integrity, other medical conditions, and her unsafe behaviours and lack of judgment.

During her 18 months in the LTCF, the woman's acute exacerbations of her chronic medical conditions were recognized and appropriately managed. Not unexpectedly, her care needs gradually increased as her medical conditions deteriorated. In the month prior to the admission to the GH on October 15, 2003, the woman's medical status deteriorated significantly. Of concern to the Committee was the fact that there was only one medical progress note recorded during this time period on October 12, 2003.

The Committee noted the paucity of physician progress notes reflecting the woman's ongoing care needs and medical treatment strategies in the LTCF. In fact, the Committee noted the presence of only 4 physician progress notes during the 18 months the woman was in the LTCF including the initial medical assessment, the annual medical assessment, and 2 quarterly reviews. Of some concern to the Committee was the fact that there was only one recorded physician progress note during the last month of the woman's stay in the LTCF when her clinical status was deteriorating. From the documentation submitted for review, the Committee could not determine if the attending physician assessed the woman more than once during her last month in the LTCF and didn't record a progress note.

In addition, the documentation submitted for review did not include any notes to indicate that there were ongoing discussions between the physician and the woman's family members regarding care plans and changes in the woman's clinical status. The Committee could not determine if there was regular contact between the physician and family members during the last month in the LTCF and, indeed, in the previous 17 months.

The Committee noted that the LTCF utilized the services of a RN-EC in the management of the woman's care needs. The RN-EC provided medical assessments and wrote orders for topical medications and other treatments for the resident. The Committee was unclear as to the division of assessment and care responsibilities between the RN-EC and the attending physician. Recognizing that the scope of practice of the RN-EC in the Province of Ontario is an evolving one, the Committee wondered if the LTCF had a policy and procedure to clearly delineate the scope of practice of the RN-EC in the facility.

In addition, the Committee could not determine from the documentation submitted for review if there was a clear understanding by the RN-EC and the attending physician of what to expect from each other regarding the ongoing provision of care to the woman. In the Committee's opinion, the amount of communication and co-operation between these 2 groups of health care professionals could not be determined based on the documentation submitted for review.

RECOMMENDATIONS

1. The Office of the Chief Coroner should give consideration to publishing the circumstances surrounding this death in the Fifteenth Annual Report of the Geriatric/Long Term Care Review Committee to the Chief Coroner of the Province of Ontario.
2. Health care professionals working in long term care facilities should be reminded of the importance of conducting regular health care assessments on their elderly patients. In addition, elderly patients who develop a change in their medical status should be assessed promptly and comprehensively.
3. Health care professionals should be reminded of the importance of recording complete, comprehensive, and accurate progress notes regarding treatment decisions and other assessments. The principle of "not documented means not done" has been repeatedly established in the past.
4. Health care professionals should be reminded of the importance of documenting a change in an elderly patient's medical diagnoses and proposed treatment strategies to manage these conditions.
5. Acute, chronic, and long term care facilities caring for the elderly need to develop clear policies and procedures identifying the scope of practice of health care professionals working within the facility. This is especially important when more than one health care professional such as a physician and a registered nurse – extended class are providing medical care to a patient.

All members of the health care team including the patient's family should have a clear understanding of the role and responsibility and limitations of each of the health care providers.

6. Health care professionals should be reminded of the importance of communication amongst all members of the health care team including family members. The importance of holding case conferences involving all members of the health care team including family members for the purpose of ensuring adequate communication, the relating of physical findings, and the clarification of realistic treatment decisions and goals cannot be overemphasized.

CASE #6

ISSUES

1. Medical/Nursing Management
2. Communication and Documentation

HISTORY

This is the case of an 82 year old woman whose past medical history included the following:

1. Atherosclerotic heart disease,
2. Chronic obstructive pulmonary disease,
3. Hypertension,
4. Hypothyroidism,
5. Hypercholesterolemia,
6. Blindness in the left eye,
7. Carotid stenosis,
8. Tricuspid valvular disease,
9. A 50+ pack year smoking history,
10. Diverticulosis which had been diagnosed in December 2002,
11. Severe degenerative disc disease,
12. Osteoarthritis of her knees,
13. Constipation secondary to analgesics prescribed to control chronic pain, and
14. Chronic severe pain present since December 2003.

The Committee noted that many of the following observations were based on the daughter's recollection of her mother's history and were submitted to the Committee in the absence of the family physician's medical records.

According to the daughter, her mother had an xray for her back pain on December 12, 2003. Three days later on December 15, 2003, the woman saw her family physician (FP) to obtain the results of the xray which apparently revealed the presence of osteoporosis and marked narrowing of the L5-S1 disc space. Acetaminophen with Codeine 15 mg. was prescribed to control pain.

On December 21, 2003, the woman was seen in the emergency room (ER) of the general hospital (GH #1) because of low back pain and difficulty in ambulation. Treatment prescribed included a dose of 12.5 mg. of Rofecoxib and Acetaminophen/Oxycodone Hydrochloride. The ER physician discharged the woman to the care of her family physician (FP) with the recommendation that the FP review the xrays and consider the ordering of a CT scan.

According to the daughter's summary, her mother was seen by the FP on December 22, 2003 and was given an injection of Meperidine Hydrochloride.

On December 26, 2003, the woman was admitted to another general hospital with hip pain and a history of falls in November 2003 and on December 24, 2003. Xrays of her lumbosacral spine, left hip, pelvis, and left knee failed to demonstrate the presence of a fracture. A bone scan showed mild to moderate degenerative changes in these areas. Blood work drawn on January 1, 2004 was reported as follows:

1. Urea – 14.2,
2. Creatinine – 157, and
3. White blood cell count – 14.4.

On January 5, 2004, her blood results were as follows:

1. Urea – 10.4,
2. Creatinine – 124, and
3. White blood cell count – 11.7.

On December 31, 2003, the woman was transferred from the acute care ward to the rehabilitation unit where she remained until January 14, 2003 when she was discharged home. At the time of discharge, she was able to transfer independently and could ambulate 50 meters with a rolator and occasionally a cane. In addition, home physiotherapy was planned. Discharge medications included the following:

1. Lorazepam,
2. Ramipril,
3. Levothyroxine Sodium,
4. Hydrochlorothiazide,
5. Enteric Coated Acetyl Salicylic Acid,
6. Verapamil Hydrochloride,
7. Acetaminophen/Oxycodone Hydrochloride, and
8. Pravastatin Sodium.

According to the daughter, the woman had her initial assessment by (name) Home Care on January 15, 2004. The record of this assessment was not submitted to the Committee for review. The Home Care reassessment of February 13, 2004 apparently noted that she was independently mobile in her residence. The record of this follow up assessment was not submitted to the Committee for review.

According to the daughter, between January 21, and February 25, 2004, the woman was seen by her FP because of ongoing knee discomfort. Sleeping pills were requested. It would appear that the FP recommended that consideration should be given to placing the woman in a licensed long term care facility.

On March 5, 2004, the woman presented to the ER of the GH for hip pain following a fall 2 days earlier. Xrays were done which demonstrated the presence of degenerative disc disease of the lumbosacral spine and no evidence of fracture of the pelvis or left hip. Incidental note was made of the presence of advanced atherosclerosis of the aorta. Aneurysmal dilatation of the aorta was not present.

On March 12, 2004, the woman presented to the ER of the GH with discomfort in her left leg. The discharge diagnosis was degenerative disc disease. Discharge medications included long acting Morphine Sulfate 15 mg. BID. for 2/7 then TID. and Acetaminophen with Codeine 15 mg. 1-2 tablets q3h. A referral was faxed to the Community Care Access Centre (CCAC).

On March 14, 2004, the woman presented to the ER of the GH with discomfort in her left knee. Xrays demonstrated the presence of osteoarthritis of both knees. The ER physician suggested referral to an orthopedic surgeon and prescribed Diclofenac Sodium/Misoprostol 50 mg. TID.

On March 20, 2004, according to the daughter's summary, the woman presented to the ER of the GH with loose bowel movements. Apparently a blood transfusion was administered.

On March 22, 2004, the woman was admitted to the GH with diarrhea. An intravenous of normal saline was commenced. Investigations revealed the presence of the following:

1. Stool positive for occult blood, and
2. Positive Clostridium difficile (C. diff.) toxin which resulted in the prescribing of Metronidazole.

On March 27-28, 2004, the woman was given 3 Sodium Phosphates enemas in preparation for her sigmoidoscopy.

On March 29, 2004, the sigmoidoscopy was performed to a distance of 40 centimeters. No evidence of ulceration or inflammation was detected. The diagnosis of a suspected diverticulosis was made. On admission, her laboratory investigations were as follows:

1. Hemoglobin – 117,
2. Hematocrit – 0.34,
3. White blood cell count – 17.5,
4. Creatinine – 115, and
5. Urea – 11.5.

At the time of discharge on March 31, 2004, her laboratory results were as follows:

1. Hemoglobin – 96,
2. Hematocrit – 0.28,
3. White blood cell count – 9.0,
4. Creatinine – 82, and
5. Urea – 3.0.

The Committee noted that there was no documentation to indicate that a blood transfusion was given during this hospitalization. In addition to her regular medications, an additional 5 days of Metronidazole was prescribed. A barium enema was booked for early April 2004.

On April 3, 2004, the woman was readmitted to the GH because of rectal bleeding and bilateral pitting edema. Admission laboratory investigations revealed the following:

1. Hemoglobin – 95,
2. Hematocrit – 0.38,
3. White blood cell count – 8.8,
4. Creatinine – 97, and
5. Urea – 4.7.

At 0600 hours on April 4, 2004, the woman's laboratory investigations were as follows:

1. Hemoglobin – 85,
2. Hematocrit – 0.25, and
3. White blood cell count – 7.9.

Two units of packed red blood cells were given. On April 5, 2004, her hemoglobin/hematocrit was measured at 115/0.33. A barium enema was done and demonstrated the presence of stenosis of the midsigmoid probably secondary to diverticulitis. The colon contained a large amount of stool. Post examination, an enema was given to flush out the remaining barium. A (? surgical) consultant noted that "a surgical procedure was to be avoided if

possible as most of the colon would have to be resected as you cannot identify the exact site of bleeding”.

The woman was seen by an orthopedic surgeon who injected Cortisone into her iliotibial tract bursa.

On April 8, 2004, the woman was discharged home on the following medications:

1. Metronidazole,
2. Fluvastatin Sodium,
3. Verapamil Hydrochloride,
4. Ramipril,
5. Levothyroxine Sodium,
6. Hydrochlorothiazide,
7. Acetaminophen, and
8. Enteric Coated Acetyl Salicylic Acid.

According to the daughter, the woman was seen in the FP's office on April 15, 2004 and was given a prescription for Morphine Sulfate. She apparently requested a CT scan/MRI.

On April 17, 2004, the woman presented to the ER with constipation. Xrays showed excessive stool in the colon with no evidence of obstruction. Two Sodium Phosphates enemas were given with moderate results following which she was discharged home.

On April 26, 2004, the woman was re-examined by the orthopedic surgeon.

On May 4, 2004, the CT scan of the lumbosacral spine was done and showed the following:

1. Probable diffuse disc bulging,
2. Possible disc herniation,
3. Possible nerve root tumour,
4. Associated narrowing of the spinal canal, and
5. Some compression of the adjacent thecal sac.

The report suggested that a MRI “may be of some use to evaluate the patient”. The MRI was booked for June 2, 2004 but was rescheduled to June 30, 2004 when the woman was admitted to the GH.

On May 10, 2004, the woman was admitted by the FP because of osteoarthritis, chronic severe pain, and inability to cope at home. Admission medications included the following:

1. Morphine Sulfate 5 mg. q2h. prn.,
2. Long Acting Morphine Sulfate 15-30 mg. bid.,
3. Ramipril,
4. Fluvastatin Sodium,
5. Levothyroxine Sodium,
6. Hydrochlorothiazide,
7. Lorazepam, and
8. Enteric Coated Acetyl Salicylic Acid.

On the admission note, the FP stated: "I have been trying to strike a balance between pain relief and constipation". The FP noted the presence of constipated hard stool and the diagnosis of diverticulosis. Also noted was the fact that the woman had been upset and crying in his office because she couldn't cope with her daughter. The registered practical nurse (RPN) noted that the "daughter (was) firm and controlling re: mother's illness". Lactulose 30 cc. BID. was ordered on admission but the woman refused to take this after May 15, 2004. Laboratory investigations done on May 11, 2004 showed the following:

1. Hemoglobin – 106,
2. Hematocrit – 0.30,
3. White blood cell count – 12.4, and
4. Urea – 19.8.

On May 12, 2004, her white blood cell count was 13.2 Chest xrays done on May 13 and 26, 2004 were reported as normal.

On May 18, 2004, the woman had a lumbar epidural steroid injection and sympathetic block.

On May 19, 2004, the woman passed several small rectal blood clots into the toilet. It would appear that no physician's orders were received relevant to this occurrence.

On May 25, 2004, the woman received a second lumbar steroid injection and a left knee block. Nursing notes commented on the woman's concerns about taking oral medications and her constipation.

Between May 13 – 25, 2004, the Committee noted the absence of any laboratory investigations.

On May 25, 2004, laboratory investigations were reported as follows:

1. Hemoglobin – 116,
2. Hematocrit – 0.34,
3. White blood cell count – 22.2, and
4. Urea – 13.9.

On May 27, 2004, repeat laboratory investigations were reported as follows:

1. Hemoglobin – 108,
2. Hematocrit – 0.31,
3. White blood cell count – 24.9 with a left shift and toxic granulation in the neutrophils, and
4. Blood cultures – negative after 5 days incubation.

A protein electrophoresis done on May 27, 2004 was reported on June 4, 2004 to be consistent with an acute inflammatory reaction. Ceftriaxone Sodium was ordered by a specialist.

On May 28 – 29, 2004, the woman requested that enemas be administered. Nursing staff noted that her bowel movements varied between constipation and explosive diarrhea throughout her admission.

On May 31/June 3, 2004, laboratory investigations were reported as follows:

1. Hemoglobin – 106/101
2. Hematocrit – 0.30/0.31,
3. White blood cell count – 15.2/10.9,
4. Creatinine – 116/98, and
5. Urea – 6.2/13.6.

On June 4, 2004, a stool sample for occult blood was reported to be positive. The orders for standardized sennosides and Lactulose were made prn. orders but the woman did not request that these medications be administered.

On June 7, 2004, the woman was transferred from the acute care ward to the rehabilitation unit for ambulation and trunk strengthening.

On June 9, 2004, the daughter who held the Power of Attorney (POA) for Personal Care for her mother requested to review the hospital medical record. When she raised a number of questions regarding the medical care being provided to her mother, a case conference was scheduled for June 22, 2004 to discuss progress and discharge plans.

Between June 7 – 23, 2004, Loperamide Hydrochloride was ordered on a prn. basis with 1-2 tablets being given daily.

On June 10, 2004, blood cultures were drawn and eventually reported to be negative. C. diff. toxin was detected on June 10 and 14, 2004.

On June 9, 2004, laboratory investigations were reported as follows:

1. Hemoglobin – 88,
2. Hematocrit – 0.26,
3. White blood cell count – 10.2,
4. Creatinine – 116, and
5. Urea – 10.9.

Two units of packed red blood cells were given which resulted in her hemoglobin rising to 108.

On June 20, 2004, the woman complained of crampy abdominal pain associated with an increased number of bowel movements. Her blood pressure (BP) was 128/50. Loperamide Hydrochloride continued to be administered.

On June 21, 2004, the woman passed a black bowel movement. Her BP was 88/50 and her pulse was 120.

On June 22, 2004, the woman began to have uncontrollable bowel movements. Her BP was 80/50 and her pulse was 100. Laboratory investigations revealed the following:

1. Hemoglobin – 123,
2. Hematocrit – 0.36,
3. White blood cell count – 13.0,
4. Creatinine – 130, and
5. Urea – 16.4.

On June 23, 2004, an abdominal xray demonstrated the presence of severe constipation with no evidence of a bowel obstruction. Atropine Sulfate/Diphenoxylate Hydrochloride continued to be given to control her loose bowel movements. After the abdominal xray results were reported, Lactulose 30 cc. and a Bisacodyl Suppository were administered. The Committee noted that the woman was still in the rehabilitation unit.

On June 23, 2004, nursing staff noted that the woman was very weak, confused, and was not moving well. Her BP was 90/40 and her pulse was 80. Laboratory investigations drawn at 0750 hours were reported as follows:

1. Hemoglobin – 128,
2. Hematocrit – 0.37,
3. White blood cell count – 21.8,
4. Creatinine – 212, and
5. Urea – 22.0.

At 2300 hours, her intravenous line came out. Four attempts to reinsert the intravenous line were unsuccessful which resulted in the order being given for normal saline to be administered subcutaneously at 55 cc./hour. Nursing staff noted that the woman complained of abdominal pain and a lot of gas. Thirty (30) cc. of liquid stool was passed.

At 0200 hours on June 24, 2004, the woman complained that her hands were cold, her feet were hot, and that she was sweating. Nursing staff noted that she was very confused. An analgesic and Lorazepam were administered. The woman did not sleep all night. At 0735 hours, nursing staff notified the family physician of the change in the woman's clinical condition. At that time, the woman was cold to the touch, had a respiratory rate of 32, had a pulse of 110, and had absent bowel sounds. Laboratory investigations were reported as follows:

1. Hemoglobin – 131,
2. Hematocrit – 0.38,
3. White blood cell count – 38.3,
4. Creatinine – 338,
5. Urea – 28.7, and
6. INR – 2.1.

The family physician immediately attended and assessed the woman but resuscitative measures were unsuccessful with death being pronounced at 0900 hours. The Committee noted that blood cultures drawn that day were reported to be growing two organisms on June 27, 2004, three (3) days after the death.

Post mortem examination revealed the presence of the following:

1. Perforated diverticular abscess of the sigmoid colon,
2. Hard stool in the colon with no evidence of a bowel obstruction,
3. Peritonitis,
4. Micro pulmonary emboli,
5. Cardiomegaly,

6. Left ventricular hypertrophy,
7. Moderate/severe triple vessel coronary artery atherosclerosis,
8. Moderately severe atherosclerosis of the aorta and other major blood vessels,
9. Bilateral renal cortical cysts, and
10. A multinodular goitre.

The pathologist concluded that the cause of death was “sepsis secondary to a perforated diverticular abscess and pulmonary embolism.

DISCUSSION

This is the case of an 82 year old woman who had a number of longstanding, complicated medical conditions including:

1. Atherosclerotic heart disease,
2. Chronic obstructive pulmonary disease,
3. Hypertension,
4. Hypothyroidism,
5. Hypercholesterolemia,
6. Blindness in the left eye,
7. Carotid stenosis,
8. Tricuspid valvular disease,
9. A 50+ pack year smoking history,
10. Diverticulosis since 2002,
11. Severe degenerative disc disease,
12. Osteoarthritis of her knees,
13. Constipation secondary to analgesics prescribed to control chronic pain, and
14. Chronic severe pain since 2003.

There can be no doubt that the woman required antiinflammatory and narcotic medications to control her severe pain and the use of these medications may have contributed to the development of constipation. The Committee agreed with the family physician when he noted that he was trying to “strike a balance” between pain relief and constipation. Her complicated clinical course resulted in multiple visits to the ER, physician visits, and hospitalizations in an attempt to keep her comfortable. Given her multiple medical diagnoses and limited reserves, it was the Committee’s opinion that her clinical course and eventual outcome should not have been unexpected.

Having said the above, the Committee wanted to comment on a number of areas related to the daughter's concerns and the woman's medical management. These areas included the following:

1. The Management of Severe Pain,
2. The Management of her Bowel Function, and
3. Communication.

1. The Management of Severe Pain

There can be no doubt that the woman had severe pain due to degenerative disc disease of the lumbosacral spine and osteoarthritis of both knees present since December 2003. Investigations included xrays in December 2003, a bone scan, and a CT scan on May 4, 2004. A MRI examination was to have been done on June 2, 2004 but was rescheduled for June 30, 2004. It was the Committee's opinion that the performance of a CT at an earlier point of her illness would not have altered the medical management and her eventual terminal illness.

Medical interventions included physiotherapy, non-steroidal anti-inflammatory drugs, (NSAIDs), analgesics, and steroid injections. The prescribing of NSAIDs to combat pain from the inflammation associated with arthritis is well recognized to be an effective therapeutic intervention. It is also well known that these medications may have serious side effects such as gastrointestinal bleeding. In this particular case, the Committee could not absolutely determine if the use of NSAIDs contributed in any way to the development of gastrointestinal bleeding in this woman.

Similarly, steroid injections were given to relieve the pain of the woman's osteoarthritis. Several injections were given at different sites with good effect. In the Committee's opinion, these injections were necessary and reasonable.

Concern was expressed about the prescribing of Morphine Sulfate to control the woman's severe pain. The Committee was aware that other less potent narcotics had been previously prescribed but were ineffective in controlling her pain. It has been the Committee's experience that the prescribing of Morphine Sulfate is entirely appropriate in the context of chronic severe pain.

2. The Management of her Bowel Function

When the woman developed diarrhea on March 17, 2004, the physician discontinued the Diclofenac Sodium/Misoprostol and prescribed Celecoxib. Five (5) days later, the woman was admitted to the GH at which time it was noted that she had occult blood in her stool and was positive for C. diff. toxin. A

sigmoidoscopy done on March 29, 2004 resulted in the diagnosis of diverticulosis. When her clinical condition improved, she was discharged home on March 31, 2004 on Metronidazole which was entirely appropriate.

On April 3, 2004, the woman was readmitted to the GH with rectal bleeding and bilateral pitting edema. A blood transfusion was given and a barium enema was performed which demonstrated the presence of a stenosis of the midsigmoid probably secondary to diverticulitis. One of the daughter's concerns was that a diagnostic laparotomy was not performed. On this admission, the woman was seen by a surgical consultant who noted that "a surgical procedure was to be avoided if possible as most of the colon would have to be resected as you cannot identify the exact site of bleeding". It has been the Committee's experience that the performance of a diagnostic laparotomy with subtotal/total colectomy for diverticular disease is an extremely high risk procedure even in a younger, less compromised patient. For the above noted reasons, the Committee concurred with the decision not to surgically intervene at this time.

The Committee noted that the woman required blood transfusions on at least two (2) occasions to replace the blood she was losing from her gastrointestinal tract. The decision to manage this condition conservatively and not surgically was both difficult and clinically challenging to the treating health care professionals.

Following the barium enema, the woman was given laxatives to clear her colon. Antidiarrheals were given when required. From the documentation submitted for review, the Committee could not determine if the health care professionals considered if the woman's ongoing diarrhea was due, in part, to overflow incontinence in which case, the antidiarrheals may have been an aggravating factor.

In the day or two prior to the woman's death, nursing staff noted changes in her vital signs and that they were unable to restart her intravenous. Given that the rehabilitation nursing staff continued to administer analgesics and Lorazepam and that the family physician ordered subcutaneous fluid support, the Committee suspected that the health care team may not have fully appreciated the significance of the change in the woman's clinical status. Even if the significance of these changes was recognized, the Committee suspected that aggressive medical support and surgical intervention may not have resulted in a favourable outcome.

3. Communication

According to the hospital medical record, it would appear that, up until the few days prior to her death, the woman was competent to make her own treatment decisions. The medical record would suggest that her family was kept informed

of the ongoing care issues. In the Committee's mind, given the woman's competency, it was unnecessary for the health care professionals to inform her family of every change in the woman's clinical status. The Committee believed that the woman's daughter's advocacy, while firm and controlling, was based on a deep love for her mother.

And finally, the Committee wanted to comment on the process where the "Do Not Resuscitate /DNR" was obtained. Even though a nurse noted on June 23, 2004 that the family advised nursing staff that they wanted a DNR order, the Committee suspected that there was limited discussion with the woman's family on this issue given the absence of documentation in the medical record.

RECOMMENDATIONS

1. The Office of the Chief Coroner should give consideration to publishing the circumstances surrounding this death in the Fifteenth Annual Report of the Geriatric/Long Term Care Review Committee to the Chief Coroner for the Province of Ontario.
2. Health care professionals should be reminded of the importance of closely monitoring the intravascular volume status of elderly patients with ongoing fluid loss (i.e. diarrhea).
3. Health care professionals should be reminded of the importance of ensuring that chronically ill elderly patients who develop an acute illness are transferred to and monitored in an appropriate clinical setting.
4. Health care professionals should be reminded that constipation and obstipation are common, preventable, and treatable medical conditions that affect the elderly. Untreated, these conditions can be devastating and may even result in death. Once obstipation is suspected, aggressive investigation and treatment should be considered on a case by case basis.

As with many geriatric syndromes, obstipation may present either typically (abdominal pain, fecal incontinence) or atypically (confusion, delirium). Health care professionals should be especially wary of elderly patients who present with constipation/obstipation who have associated systemic symptoms (tachycardia).

In these cases, the ordering of laboratory investigations and an EKG should be considered on a case by case basis. Elderly patients receiving medications known to decrease bowel motility such as narcotics or other

proconstipatory drugs such as calcium channel blockers should be put on a prophylactic bowel regimen. The regimen should include the addition of fibre to their diet, the provision of stool softeners, and prn laxatives such as Milk of Magnesia or Lactulose every night that there isn't a bowel movement. If there is no bowel movement for three days, consideration should be given to the administration of an enema.

The occurrence of overflow incontinence should alert the treating health care professionals to the possibility that the patient has developed fecal impaction with overflow incontinence. Fecal impaction can be difficult to treat and should be treated vigorously when present. Careful abdominal and rectal examinations should be performed. The finding of soft stool or no stool in the rectum does not absolutely rule out the presence of fecal impaction.

In these cases, an abdominal flat plate xray or a CT scan should be ordered to rule out the possibility of a higher impaction that cannot be detected on rectal examination and/or a developing acute/subacute bowel obstruction (dilated loops of bowel with air/fluid levels). While manual disimpaction should be the first intervention attempted, the presence of obstipation with a higher impaction should primarily be managed with enemas to clear the bowel from below. In some cases, the addition of oral osmotic laxatives such as Lactulose can be used to clear the bowel from above. Gastrointestinal lavage solutions have also been proven to be very effective in treating fecal impaction.

Health care professionals should always be observant for the development of complications and especially for the development of complications related to the treatment of obstipation/fecal impaction.

Reference: Constipation Can Be Deadly – Canadian Family Physician
Volume 38, October 1992; Goldlist B., Naglie G., Gordon M.

5. Health care professionals should be reminded of the importance of writing a detailed progress note when entering a "DNR" order on a patient's medical record. The progress note should clearly indicate the rationale behind the decision making process and by whom the decision was made. This note could then eliminate ambiguity as to what other investigations and/or treatments are indicated in the event of the occurrence of an acute problem, short of carrying out CPR or assisted ventilation. The importance of reviewing this decision with the patient if competent, or family members, cannot be overemphasized.

6. Health care professionals are reminded that family members are an important part of the health care team. Efforts should be taken to educate family members on the complexities of the patient's medical impairments, the short and the long term goals of the prescribed therapeutic interventions, the reasons why specific therapies have been prescribed, and the potential complications that could develop.

Despite the best efforts of all the members of the health care team including family members to achieve positive outcomes, it has been the Committee's experience that the multiple health conditions present in the ill, elderly resident often results in ongoing potentially debilitating problems and/or the development of additional, unexpected complications.

The ongoing education of family members should form an integral part of the care plan. Even with this process, family members may still have difficulty accepting the inevitability of the demise of an elderly loved one.

7. Health care professionals should be reminded of the importance of communication amongst all members of the health care team including family members. The importance of ongoing case conference involving all members of the health care treatment team including family members for the purpose of ensuring adequate communication, clarification of treatment goals, and delineation of possible treatment interventions cannot be overemphasized. Documentation of the entire process on the medical record should be mandatory.

RECOMMENDATION ANALYSIS 2000 - 2004

For the Fifteenth Annual Report, the Committee prepared an analysis of the types of recommendations generated over the last five years.

TYPES OF RECOMMENDATIONS 2000 – 2004

	2000	2001	2002	2003	2004
TOTAL # OF CASES	20	30	21	17	25
MEDICAL/NURSING MANAGEMENT	11(27)	17(44)	13(28)	7(16)	14(26)
COMMUNICATION/ DOCUMENTATION	4(21)	10(14)	8(12)	9(10)	9(16)
USE OF DRUGS IN THE ELDERLY	6(17)	11(16)	6(17)	4(8)	7(10)
ADMISSION/DISCHARGE/ TRANSFER PROCEDURES	3(6)	6(9)	6(10)	4(8)	3(3)
DETERMINATION OF CAPACITY AND CONSENT FOR TREATMENT/ DNR	3(3)	5(7)	2(2)	3(4)	2(2)
THE MINISTRY OF HEALTH AND LONG-TERM CARE	4(5)	7(10)	0	2(4)	6(10)
THE ACUTE AND LONG TERM CARE INDUSTRY	0	0	0	0	6(12)
THE OFFICE OF THE CHIEF CORONER	6(6)	8(8)	4(4)	8(8)	10(10)

A number followed by a bracketed number (i.e. – 10(10)) indicates that there were 10 cases with a total of 10 recommendations made relevant to the topic area.

As was the case over the previous years, the Committee noted that the “Medical/Nursing Management” section was the number one topic area for recommendations over the last five years. This was followed by the topic areas of “Communication and Documentation” and “The Use of Drugs in the Elderly”.

While the statistics recorded in the preceding tables are of some value in monitoring general trends of types of cases reviewed and types of recommendations generated, the Committee continues to be of the opinion that the Office of the Chief Coroner should develop a mechanism to track the implementation rate of the recommendations, the results of which could be published in the annual reports. This would give the Committee and the citizens of Ontario a more accurate measure of the Committee’s effectiveness.

SUMMARY

The Committee is thankful for continuing to have the privilege of serving the Office of the Chief Coroner and the citizens of Ontario over the past year. We trust that these recommendations will be of value in ensuring that elderly residents of acute and long term care institutions and “care” homes in Ontario receive the best possible care in the future.

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