CARE FOR ELDERS

Falls in the Elderly

~ Case Study ~

FEBRUARY 2011
Acknowledgments:

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For information on other modules please contact:

Dr. Martha Donnelly
Division of Community Geriatrics
Department of Family Practice
c/o GPOT-CP5D
855 West 12th Ave.
Vancouver, B.C.
V5Z 1M9
marthad@mail.ubc.ca

Falls in the Elderly (2003):

• Reva Adler, geriatrician
• Janet Kushner-Kow, geriatrician
• Jean Jamieson, family physician

Revised April 2008:

• Marcia Carr, RN, CNS
• Fabio Feldman
• Janet Kushner-Kow, geriatrician
• Margaret McPhee, Senior
• Martha Donnelly, geriatric psychiatrist

Revised February 2011:

• Janet Kushner-Kow, geriatrician
• Marcia Carr, RN, CNS
Falls in the Elderly
Goals and Learning Objectives

Following completion of this module, you will be able to:

1. identify biological/medical, psychosocial, environmental and demographic factors that increase risk for falls and injury in the elderly,

2. utilize both screening and assessment tools that can be used to differentiate the degree of fall/injury risk in individual patients,

3. describe key inter-disciplinary interventions that correlate with the identified risks presented by the patient,

4. develop a care plan that includes individualized patient-identified goals which cover the full spectrum of service delivery areas to assist the patient in mediating his/her risk factors for falls and injury,

5. identify the need to include osteoporosis screening, assessment and management in the care plan, and

6. determine ways in which the health care professional can evaluate the effectiveness of the plan.
Part 1

Mrs. Henrietta James is an 86 year old retired primary school teacher. Her husband was a salesman and died in hospital of lung cancer five years ago. Since then she has continued to live alone in a two-storey house several miles from the local town where she taught for many years. She has one son, Bryce, who is a carpenter and lives with his wife and one adult son in the next town over which is 60 km away. On his weekly visit with his mother, he notices that she has a black eye and bruising on her left hand. She finally admits that she fell last week but wasn’t really injured, and otherwise says “I have very little to complain about, just getting older”. He has been trying for several to encourage her to move into an apartment closer to where he lives but Mrs. James is very reluctant to give up her house and the independence she associates with it. Mrs. James currently receives private homemaking help once a week; Bryce has felt that she would benefit from additional help but she refuses saying that she is fine. Bryce insists that she see her family doctor and she finally agrees after much persuasion.

Home Health Services receive a referral from her family physician to see Mrs. James. The GP sends a letter saying that she has not seen Mrs. James for six months as she has been refusing to come into the office; so she has had her medications renewed by phone. This physician does not do house calls. She received a call from the client’s son expressing concern that Mrs. James has been falling. The family physician states that Mrs. James has a history of hypertension, congestive heart failure, diabetes mellitus type 2, osteoarthritis and dizziness NYD.

The home care nurse was designated to do the initial visit to Mrs. James’ house. Her son made sure that he was there during the assessments.

Bryce reviewed with the nurse his mother’s recent falling and her minimizing the injuries that she received. He also stated that Mrs. James started showing signs of increasing forgetfulness when her husband died. He feels that her memory is now worsening. He says that she complains of pain in her knees and back, and does not sleep well.

Her son is also worried that she has fallen three times in the last two weeks, and has not left the house in the last month.

Questions:
1. Discuss the issues likely of greatest concern for Mrs. James and her son at this point.

2. What are the four parts of a falls assessment and how would you proceed in this case?

Please do not turn the page until instructed by the facilitator
Part II

The home care nurse was able to talk with Mrs. James alone. She found out that she always wanted more children but it was not to be. Her students were all her “children”. Mrs. James does not drink or smoke cigarettes. There is one elderly neighbour who tries to check on her daily and former students sometimes drop in to see her. However, in the last two years, she has stopped all of her outside activities and has turned away visits. She has one elderly sister in Ontario who has Alzheimer’s disease and lives in a nursing home, and Mrs. James states that she doesn’t want anyone putting her in an old folk’s home.

Mrs. James finally admits that she has been falling, but puts it all down to “getting old and decrepit”. Her son says that the one time he was with her when she fell, her legs appeared to “give out” as she walked from the living room to the kitchen. She does complain of being dizzy when she gets up from the sofa, and looks unsteady. She has never had a seizure or fainted that she or Bryce can recall. She admits that she becomes short of breath at night and is up to the bathroom at least 4 times a night. She does not check her blood sugars any more as it is too much trouble. Bryce has noticed that she eats poorly even when food is brought in.

The nurse observed that she “furniture walked” to get anywhere in her house. There was only one railing on the stairs and the lighting was very poor. Her son said that he is so embarrassed about the poor state of the house and his mother’s worn out clothing. She feels that it is a waste of money to buy new shoes or clothes.

Her son is buying her groceries and paying her bills. Mrs. James is still cooking for herself. She is only taking sponge baths. The house is quite cluttered. Her old dog is her only company.

The medications she shows you in a large number of bottles are:
- naprosyn 250mg TID,
- she has received prednisone off and on for many years but is not taking any now
- Tylenol #3 1 tablet as needed (takes about 2 a day),
- ativan 2mg 1 tablet at bedtime and as needed,
- HCTZ 25mg daily,
- furosemide 40mg daily,
- digoxin 0.125mg daily,
- Serc 1 tablet TID,
- Captopril 25mg BID,
- glyburide 5mg BID;
- cough syrup PRN,
- Robaxacet muscle relaxant PRN,
- Ex-lax PRN.

Her blood pressure was 160/90 lying, 130/75 standing with slight light-headedness,
respiratory rate is 16/minute and pulse 82 and irregular. Her random glucometer reading is 6.7mmol/L.

MMSE was 25/30 losing two points on date and day of the week, one on WORLD backwards, repetition and immediate recall. The Geriatric Depression Scale short form indicates a possibility of depression despite her denial of feeling so.

Clock-drawing was accurate.

Affect flattened and mood sad.

She does not want to go to any day hospital or inpatient program, but is willing to continue to have homemaking and assessments in her home.

Questions:
1. Identify Mrs. James’ risk factors that may be contributing to her falling, list her issues. For each issue, who would you like to call on now to continue the assessment and what will they do?

Please do not turn the page until instructed by the facilitator.
Part III.

The nurse feels that Mrs. James is at high risk for a serious fall and fractures as Mrs. James is quite de-conditioned with poor balance, she asks the physiotherapist to see her. Mrs. James has orthostatic hypotension, urge/stress urinary incontinence and multiple medications. Bryce wants to help with the house but does not know where to start. The occupational therapist is asked to work with Bryce. A report is sent to Mrs. James’ GP about all their findings to date. The GP makes a referral to the outreach geriatrician who visits once a month at the local hospital’s out-patient clinic.

The outreach geriatrician sees Mrs. James. She finds that she has poor vision for reading-left eye acuity 80/20, right eye 25/20. She has bilateral cataracts and presbycusis. JVP 5cm ASA, soft II/VI systolic ejection murmur in the aortic area. Soft S3 heard at the apex. Chest clear. Moderate kyphosis of spine with two wedge fractures of T10 and T12. Wasting of quadriceps bilaterally. Strength hip flexors and knee extensors 4-/5 bilaterally. Poor proprioception both toes. Vibration sense decreased in toes, normal in ankle. A MoCA is 24/30 and her GDS is 8/15, indicating that she has mild cognitive impairment and may be clinically depressed.

Blood work reveals a slightly increased creatinine at 105; otherwise normal blood work including CBC, electrolytes, calcium, B12, TSH, albumin, liver enzymes and digoxin level. Her HbA1C is 5.5%. Spinal x-rays reveal multiple old compression fractures. Her CT head shows a small old subdural hematoma and several old deep lacunar infarcts.

The son purchased a glucometer, and the nurse finds she has occasional hypoglycemic episodes (BG 2.5, 2.8).

She is seen by the physiotherapist who finds her Berg balance scale is 33/56, she has difficulty transferring, turning, reaching, and balancing on one foot.

The OT completes an inside and outside assessment of the environment. She also does a functional assessment for activities of daily living (ADLs) and instrumental activities of daily living (IADLs). She finds Mrs. James very distractible with poor attention span and concentration. When making a cup of tea for them, she forgets that she had put the kettle on and asks what the whistling noise is. This is the kettle boiling. She says that she is embarrassed and completed the tea preparation without any further problems. When kept on task, she was able to complete her ADLs well. She said that her son does all her banking; so she is fine.

Questions:
1. What would you like to do now? Develop recommendations including medication changes for Mrs. James. Specify the team member(s) who will carry out the plan.
2. How would you discuss your recommendations with Mrs. James and her son?

3. What barriers exist in this case to further fall reduction?

Please do not turn the page until instructed by the facilitator.
Part IV.

A plan is discussed with Mrs. James and her son. After initial resistance, she decides to "go along with it" as her son says that if she wants to stay at home, she needs to accept help for her safety.

Mrs. James is assigned a long term case manager who arranges for a home support worker to assist her with a bath three times a week and to assure that she takes her medications. The private homemaker continues to come in to do housecleaning.

The geriatrician discusses her recommendations with Mrs. James’ regular GP and they agree to an ongoing medical monitoring schedule. They mutually agree to stop the Serc, naprosyn, glyburide, Tylenol #3 and, after a great deal of discussion, a weaning schedule to decrease the lorazepam to 0.5mg/day. The GP discusses the medication reconciliation with Mrs. James' pharmacist and her medications are simplified to a twice a day schedule. The GP starts regular acetaminophen and changes the ACE inhibitor to ramipril 10mg per day. Her heart failure is improved and the furosemide is discontinued. A follow-up blood pressure is 135/85 with no postural change. Her blood sugars are improved with no further hypoglycemia. The physicians decide to wait until she is medically stable before prescribing an anti-depressant as they need to better differentiate Mrs. James' baseline. A bone density test has been arranged and she is started on calcium, vitamin D and a bisphosphonate.

Her son worked with the OT on a repair schedule, starting with inside needs first. The bathroom was made more functional and the staircase now has railings on both sides. The stairs have a clearly marked top and bottom step with added non-glare lighting. Bryce states two weeks later that his mom seems somewhat clearer and steadier on her feet and has had no further dizzy spells. She still seems to have some memory problems but is better able to stay focused on a conversation.

The physiotherapist who was a former student of hers whom she very much liked recommends some lower limb strengthening and gait exercises, and the purchase of a walker. Mrs. James again protests that she does not need a walker or a cane as they are expensive and she doesn’t go out anyway so does not see the need. However, the physiotherapist encourages her to attend the exercise and dance program at the local Senior’s Centre as his wife (another one of her favourites) teaches the classes there. Mrs. James goes to the exercises and is very much enjoying the dancing with a walker program. Her son bought the walker as her birthday gift.

She is referred to an ophthalmologist but she doesn’t want to go to any more appointments. She says that she feels like she is being poked, prodded and turned inside out. She says that she will tell the “helpers” when she is ready to do more; not them telling her anymore.

Please do not turn the page until instructed by the facilitator.
Part V:

Mrs. James presents to the ER at the local hospital one year later. The geriatrician who saw her before is re-consulted. Bryce reports that she did have a couple of minor falls in the meantime, but seemed much better in terms of her walking. However she did not do much to get out of the house and he is worried that her memory seems to be worsening. She fell again this time in the middle of the night after about a week of increasing confusion and some cough. When she is seen by the doctor she is sleepy. She is diagnosed with pneumonia and is put on an IV, foley catheter and IV antibiotics.

Questions:

1. What has likely happened? What steps should the in-hospital team take to prevent falls while admitted?

Please do not turn the page until instructed by the facilitator.
Part VI:

The team discontinue the foley catheter and IV, and mobilize Mrs. James immediately. She recovers quickly and they are able to remove her oxygen tubing as well. The physicians reassess her medications and confirm her delirium, but there appear to be no other causes except for her infection. She is provided with a low bed, non-slip socks and a 1:1 sitter the first night when she is agitated. She is monitored for constipation and the nurses have to give extra doses of lactulose periodically. Unfortunately she still remains somewhat confused and tries to get out of bed at night. She does fall once at 2am but luckily does not sustain serious injury. As she continues to mobilize, she starts to get to the bathroom by herself and is able to climb one flight of stairs, but often will not use the walker which is at the bedside. Her son is pleased that she is improving but is upset when the team mentions that they are planning discharge as he is very worried that she will fall. Her MMSE is now 20/30 and plateaued there.

Questions:

1. How will you respond to the son’s concerns? What would you suggest for discharge planning and who on the team in hospital or in the community should do this?

Please do not turn the page until instructed by the facilitator.
Epilogue:

The team works with Mrs. James and a full family meeting is convened with Mrs. James present. The physiotherapist explains that she is good with the walker but continues to have some risk of falls with poor safety awareness. The son expresses his concerns to his mother but she adamantly wants to go home. The team explains that the fall risk is unchanged in facility, as the only way to eliminate all risk would be having staff around 24h a day which is untenable. As Lifeline was not instituted last time, the team suggests that this, as well as maximizing home support, would decrease her risk. Bryce feels that although he is concerned, he wants to respect her wishes to go home. She is discharged home with maximal supports and a follow-up arranged with her home care nurse to see how she is doing. As she leaves Mrs. James says to the team “I’m staying upright this time”.

Question:

1. What support could be offered to Mrs. James and Bryce in terms of an ongoing decision-making process?

Please review the objectives and complete the evaluation form.
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<th>Please rate the following statements (✓):</th>
<th>Strongly Disagree</th>
<th>Somewhat disagree</th>
<th>Neutral</th>
<th>Somewhat Agree</th>
<th>Strongly Agree</th>
<th>N/A</th>
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<td>1. The organization, room, and timing of the session were adequate</td>
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<td>2. The pre-reading package covered information that was new to me</td>
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<td>6. The facilitator provided new, critical information as needed</td>
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<td>8. The discussion in my group was helpful for my learning</td>
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1. Please name **two** changes in your own practice that you will implement as a result of what you learned today.

   1. ______________________________________________________________________________________________

   2. ______________________________________________________________________________________________

2. Please name **two** ways in which this session could be improved.

   1. ______________________________________________________________________________________________

   2. ______________________________________________________________________________________________