Part I – The Fall

“I don’t understand what happened. I feel terrible about it.” Verna McManus could barely speak through her tears. Margaret, the nurse who was with her in the Emergency Room (ER) waiting area, listened patiently as Verna told the story.

“My sister arrived yesterday, and she’s fallen and injured her head. I’m afraid she’ll be sent to Intensive Care.” Verna fell silent.

“It sounds like you’re upset and worried about your sister,” replied Margaret. “You said she arrived yesterday?”

“Yes. I am upset.” Verna sobbed softly as she spoke. “Ruth’s husband, Frank, died suddenly two weeks ago. He retired three months ago, a few days after his 65th birthday. He and Ruth were planning to do all the things they’d always dreamed of….” Verna’s voice trailed off.

“She came to visit you?”

“Yes. Ruth lives alone in the city, in the apartment that she and Frank have had for 22 years. After the funeral, I called her every day. She told me she was having trouble sleeping, and she cried all the time. I invited her to stay with me for awhile. She came by bus yesterday afternoon.”

“Ms. McManus, I’d like to ask you several more questions about your sister. Right now she’s sleepy and unable to remember what happened to her. The information you can give me will help us take care of her.”

“All right.” Verna was beginning to seem a little calmer.

Instructions to Students

In your groups you should identify the facts of the case, note the information gaps, and identify the hypotheses and learning issues in the case.
Part II – Background

Margaret learned the following from Ms. McManus:

Ruth James was a short, thin, 65-year-old woman who had been in excellent health prior to admission to the ER. That morning, at approximately 7:30 a.m., she had fallen three steps from the bottom of the staircase in Ms. McManus’ home, hitting her head on the handrail and lacerating her scalp above her right ear. Ms. McManus stated that her sister lost consciousness. However, Ruth was responsive to her name when she arrived at the ER.

According to Ms. McManus, Ruth has no chronic health problems, except for occasional stiffness in her knees. She saw her physician only for yearly check-ups. Ms. McManus described her sister as a person who led an active life and exercised regularly, usually taking a 30-minute walk in her neighborhood every day. She had worked as a secretary/receptionist at her neighborhood elementary school until a month before her husband’s retirement.

Ms. McManus insisted that her sister takes no medications and had no allergies, including allergies to foods and medications.
Part III – Medications?

As Margaret finished her conversation with Verna McManus, Ruth’s son, Mark James, arrived at the ER and asked about his mother. He joined his Aunt Verna in the waiting area. Margaret returned to the nurses’ station and paged Carlos Park, the pharmacist assigned to the ER.

“Carlos, a new patient will be admitted this morning: Ruth James, who is in Room 3. She was brought to the ER after a fall. When her CAT scan is complete, she’ll be admitted to the general medicine patient care unit. She’s unable to tell us anything about her medications. Her sister and son are in the waiting area. Her sister insists that Ruth takes no medications. Would you help us verify that? Anything you can find out will help.”

Carlos arrived at the ER nurses’ station a few minutes later, accompanied by two pharmacy students, Amanda and Jake, who were “shadowing” him that day. Carlos introduced himself and the pharmacy students to Verna McManus and Mark James. He explained his purpose in talking with them and asked for their help.

Mark told Carlos that he helped Ruth with her medical insurance claims and knew what medications she took. He told Carlos the name of Ruth’s physician and pharmacy and verified that his mother had been healthy, had no allergies, and hadn’t taken any medications. However, he added that Ruth’s doctor prescribed a sleeping pill named Halcion® for her a few days after his father’s funeral.

“What else can you tell me about it?” asked Carlos.

“Well, I know the tablet is blue. And she told me the doctor said she could take one or two,” replied Mark. He volunteered to bring the bottle to the hospital along with the vitamins and calcium supplement his mother took every morning and the ointment she rubbed on her knees for pain after one of her walks. “When I talked with her on the telephone yesterday morning, she told me she’s been having a lot of trouble sleeping and has been taking two Halcion® tablets every night.”

“Poor Ruth!” interjected Verna. “Last night we talked a long time and had some tea right before bedtime. I put some kava in both our cups and gave Ruth two Extra Strength Tylenol PM® capsules to take.”
Part IV – Test Results

After the conversation with Ruth’s sister and son, Carlos checked the hospital computer for Ruth’s laboratory test results. He found all these to be within normal limits, according to the hospital laboratory standard, except for the following:

- serum albumin, 3.2 g/dL
- serum creatinine, 1.6 mg/dL
- total cholesterol, 240 mg/dL

Carlos asked the students, “What are your thoughts about the information we collected from Mrs. James’ family members?”

Amanda replied, “I’d like to know more about the medications she took yesterday before she fell.”

Jake added, “I’m wondering if there are any problems caused by her drugs, like the drug-related problems we’ve learned about in class. And what’s kava?”

“Mrs. James’ story is very interesting,” said Carlos. “I want each of you to do a little library work, and then we’ll discuss what we can learn from her case.”