Medical Mystery Cases A Bird's Eye View



PODCAST 33

Narrator: Point Reyes, California where thunderous ocean breakers crash against rocky headlands, and expansive sand beaches open up to grasslands, brushy hillsides, and forested ridges. It is a picture of extraordinary beauty.

Sue and Mike Franklin have spent the past 30 years running a resort near this California destination for nature lovers, adventure-seekers, and... birders. Home to 54% of all North American bird species, many visitors rent the resort cottages and spend their days viewing the over 490 types of birds and their nights—sipping Napa Valley wine by the coast.

Over the past year, the Franklins have had to make some changes to their business and daily lives as they became more concerned about Sue's father. A prostate and bladder cancer survivor, with partial hearing loss from his career as an aviation mechanic, Joe Sutter was widowed. With his age and health concerns, Sue was uncomfortable with her father living alone in Oakland—over two-hours drive with bad traffic—so they decided to renovate one of the cabins for Joe, where he could maintain his independence, pursue his passion for birding, and have Sue and Mike there for companionship and support.

On a warm May morning, Joe, always punctual, didn't show up for breakfast at the main house. Concerned by the out-of-character behavior, Sue and Mike walked the short trail to Joe's cabin.

When they arrived, they found him on the floor; confused, mumbling, and saying he couldn't see.

And so began their trip to the Emergency Department at the MarinHealth Medical Center.

Mia: Hello Mr. Sutter! My name is Mia, and I am going to be your nurse today. What seems to be bothering you?

Joe: I...I'm in a lot of pain...my stomach. I don't know what's wrong.

Mia: Okay, well we are going to see if we can help figure that out. I'm going to take your blood pressure and temperature and ask you some questions while I'm doing that. How long has your stomach been hurting?

Joe: What? What'd you say?

Sue: I'm sorry, my dad is a bit hard of hearing. Dad, how long has your stomach been hurting?

Joe: Oh, a couple of days.

Sue: We found Dad on the floor of his cabin this morning. He seemed a bit confused but said that he got really dizzy and then his legs gave out...and he fell. He's never fallen before. I think he had thrown up too... there was vomit in the bathroom.

Mike: He really seemed confused on the way here...he didn't understand where we were going or why...

Mia: Okay, Mr. Sutter. Your blood pressure is 143 over 72, which is a bit high. Your temperature is 99, also a bit high but not quite a fever yet.

Sue: I'm worried that maybe he had a stroke? Or the cancer has returned?

Mia: Dr. Chen, you have a patient in room five. Joe Sutter, 82-year-old male, abdominal pain and vomiting, very confused. History of cancer. ECG performed and ready for you to read. Oh, and he's hard of hearing.

Narrator: What bedside analytes might help Mia and Dr. Chen?

Dr. Chen: I'll go see him now. Let's go ahead and get bedside blood gases, electrolytes, and metabolites, lactate, and a troponin too.

Mia: Mr. Sutter, this is Dr. Chen. He's going to talk to you while I take some blood so we can run some tests.

Narrator: As Dr. Chen begins his initial patient exam, he notices that Mr. Sutter appears dehydrated, and instructs Mia to start Joe on an IV.

Dr. Chen: Mr. Sutter, can you tell me what's been going on? What brings you in today?

Joe Sutter: My stomach and back hurt. Everything's blurry and...I feel dizzy, or maybe a little light-headed.

Dr. Chen: Does it hurt all over or just in one spot?

Joe Sutter: My lower back ... and my stomach.

Dr. Chen: Do you feel like it's hard to move around, or keep your balance?

Joe Sutter: Yes, I fell yesterday.

Sue: Dad, you fell today!

Dr. Chen: When did this start?

Joe Sutter: I think...yesterday.

Dr. Chen: Mr. Sutter, have you had any headaches or chest pain? Or pain in your arm or shoulder?

Joe: No, but I'm dizzy and I can't see well.

Dr. Chen: I'm going to push on your stomach a bit here. That seems pretty tender. How about down here? No? Have you had any trouble urinating?

Joe: Well, yes, ever since I had prostate cancer.

Dr. Chen: Do you have any numbness or tingling in your arms or legs?

Joe Sutter: My legs gave out from underneath me.

Dr. Chen: Okay Mr. Sutter. We're going to need a urine sample so we can run some more tests and figure out what's making you feel bad. Mia, get me the point-of-care results please.

Narrator: Joe's labs showed a pH of 7.32 and bicarb of 16 indicating slight metabolic acidosis. His sodium was low at 120 and potassium was elevated at 6. Creatinine was high at 1.21 with a bedside calculated eGFR of 60, which is borderline. His BUN was 32—possibly indicating a kidney issue, dehydration, or medication related kidney problems. His lactate was 2.2. WBC count was elevated at 13,300. Total bilirubin slightly elevated at 1.7. WBC count was elevated at 13,300. Troponin was normal. Urinalysis negative.

Dr. Chen: Let's see, Mia... His symptoms indicate a stroke and that his potassium is high. We need to move quickly. I'm going to put in the order for a head and abdomen contrast CT.

Mia: Dr. Chen, the creatinine, and BUN are high and the eGFR is slightly elevated. Both sodium and potassium are a little out-of-whack. Do you want to order without contrast?

Dr. Chen: Good point Mia, let's go that route.

Narrator: Why is the elevated creatinine and eGFR important? Why was a history of kidney disease not noted in the medical history and physical exam?

Lab results returned showing urinalysis: negative. Head CT without contrast: negative. Abdominal CT without contrast indicated a perforated appendix. What symptoms and blood parameters might have indicated a perforated appendix? Was the patient at risk for septic shock? Elderly patients often do not present with classic symptoms. Perforation is more common in patients with 3 or more comorbidities. Why was it important for the patient for the doctor not to order contrast?

Dr. Chen: We've determined that your dad has a perforated appendix. We found it quickly and are rushing him to surgery.

Narrator: Acute appendicitis is the most commonly seen surgical emergency and is more frequent in elderly patients. It is a serious disease with increased morbidity and mortality, and demands an early diagnosis and treatment. Elderly patients presented to the hospital with abdominal pain should be admitted and investigated. The early use of CT scan can cut short the way to the appropriate treatment.

Clinicians should also remember elderly patients may not have conclusive clinical signs of acute appendicitis but signs of peritonitis—abdominal distention, reduced abdominal wall movement, severe tenderness—may be more pronounced.

Mike: Joe!!!! Glad to see you're out and about like normal again! So tell me, how was your walk around Abbott Lagoon?

Joe: Mostly the usual suspects...Caspian terns, blue heron...ohh, but I did see a Snowy Plover and got a photo. You know they're on the endangered list now...

Mike: Yeah, but I'm glad you're not "in-dangered" anymore. Sue and I are grateful the medical team found out what was wrong so fast. They got the entire picture, as if they had a "birds-eye view!"

Narrator: Thank you for listening to our Medical Mystery podcast. If you enjoyed this audio journey, please subscribe and share with your friends and colleagues.

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