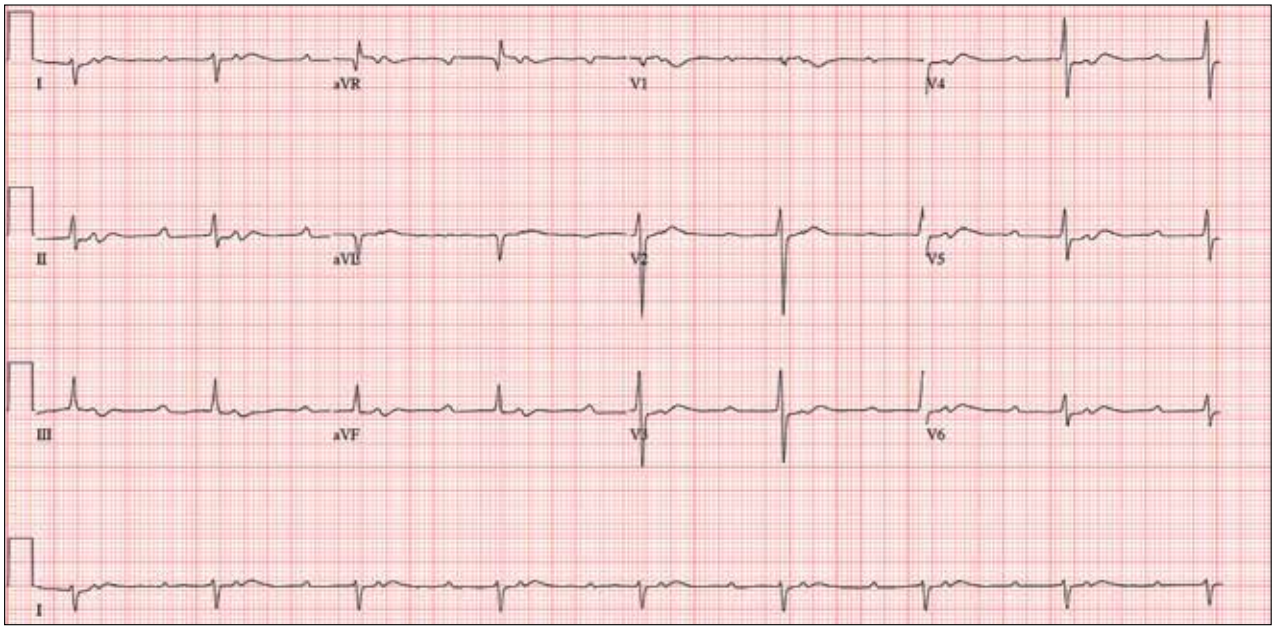
Woman's Pain is Per-cyst-ent



In the past six to eight months, a 58-year-old woman has experienced abnormal vaginal bleeding and a "heavy" feeling in her lower abdomen. She has also noticed pelvic pain with intercourse. About two months ago, she began having difficulty emptying her bladder. Abdominal CT and MRI revealed a 3-cm cyst of the right ovary. She is scheduled for laparoscopic surgery to remove it and presents for preoperative assessment.

The patient is G3P2A1 and transitioned through menopause at age 53. Medical history is remarkable for gestational diabetes during her second pregnancy; she has had no further symptoms or findings to support the diagnosis since. Both children were delivered by uncomplicated vaginal delivery. During her third pregnancy, she miscarried at 12 weeks.

She has no history of cardiac or pulmonary disease. Surgical history is remarkable for an open reduction internal fixation of a left high ankle fracture at age 18 and for dilation and curettage following her miscarriage.

Social history reveals a 30-year marriage and employment as a tax accountant. The patient drinks one to two glasses of wine nightly and has never smoked. She did try marijuana briefly during college but hasn't used any illicit substances since.

Family history is positive for coronary artery disease (father) and hypothyroidism (mother). Her children, now adults, are alive and well, with no known medical problems.

Current medications include ibuprofen for abdominal discomfort and diazepam for anxiety; she started the latter after receiving her CT and MRI results. She has no known drug or food allergies.

Review of systems reveals a two-month history of decreased energy and stamina. She denies palpitations or skipped heart beats and shortness of breath or dyspnea on exertion. She does say that she fatigues more easily than she did three months ago. The remainder of the review is uneventful.

Vital signs include a blood pressure of 108/72 mm Hg; pulse, 50 beats/min; respiratory rate, 14 breaths/min^{-1}; temperature, 97.6°F; and O_2 saturation, 98% on room air. Her weight is 158 lb and her height, 66 in.

Physical exam reveals an anxious but alert woman in no apparent distress. Cor-

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rective lenses are present. There is no evidence of thyromegaly or jugular venous distention. The lungs are clear in all fields. The cardiac exam reveals a regular rate of 50 beats/min with a regular rhythm. There are no murmurs, rubs, or extra heart sounds.

The breasts are well developed and symmetrical, with no discharge. The abdomen is soft and nontender. She states that palpation of the right lower quadrant is uncomfortable but not painful. The ovarian mass is not palpable. Vaginal and rectal exams are deferred.

Her extremities reveal full range of motion with strong peripheral pulses bilaterally. A well-healed surgical scar is present on the lateral aspect of her left lower leg. The neurologic exam is grossly intact, without focal signs.

A preoperative ECG shows a ventricular rate of 50 beats/min; PR interval, 432 ms; QRS duration, 102 ms; QT/QTc interval, 456/415 ms; P axis, 67°; R axis, 131°; and T axis, –29°. What is your interpretation?

ANSWER

The correct interpretation includes sinus tachycardia with a first-degree atrioventricular (AV) block, 2:1 AV conduction, and a right-axis deviation.

The P-P interval is 100 beats/min—twice the rate of the QRS complexes. A consistent PR interval > 200 ms supports the diagnosis of first-degree AV block, as the ratio of two P waves for every QRS does for 2:1 AV conduction. Finally, a right-axis deviation is evidenced by an axis > 90°.

These findings are suggestive of AV nodal disease and may explain the patient's recent increase in fatigue (noted in the review of systems). **CR**