

Case Report

A Surprising Cause for “Pregnancy”

Urgent message: When a test does not confirm a patient’s theory about the cause of her symptoms, both patient and provider must look elsewhere.

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Introduction

When a mother of three complains of symptoms of pregnancy, the test usually confirms that she is right. Occasionally, however, the results are surprising, as this case illustrates.

Case Presentation

WM, a 28-year-old female, presented to an urgent care with concerns that she might be pregnant and was very worried because she currently had a Mirena® IUD in place. For the past three months, she had noted fatigue, weight changes, breast discharge, and nausea, just as she had experienced in her previous three pregnancies. The discharge was milky in appearance and was noted on her clothing and during showering.

WM had not been pregnant or nursing for more than two years but was certain the symptoms were indicative of pregnancy. Her periods had stopped several years earlier, after her IUD was placed. She had noted a dull headache for several months but denied visual changes. Other than nausea, gastrointestinal symptoms such as diarrhea, constipation, or emesis were absent.

WM had tried two home pregnancy tests. To her dismay, both were negative. Past medical history was otherwise negative. She denied oral medications and is allergic to latex.

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Observation and findings

On exam, WM was in no distress. Her vital signs were normal:

- T: 98.4° F
- P: 66
- R: 12
- BP: 114/70
- O₂ sat: 100%

WM’s head and eyes, including fundal exam, were normal. She had no gross visual field defect. Her ears, nose, and throat revealed no abnormalities. Her neck was supple, without adenopathy. Her thyroid was not enlarged; no nodules were noted. Her heart rate was regular and no murmurs, gallops, or rubs were present. Her lung exam was without distress; no wheezes, rales, or rhonchi were present. Her breast exam revealed no masses. No discharge was noted during the exam. Her abdomen was soft. Her

bowel sounds were normal. No masses or palpable fundus was present. Her neurological exam, including deep tendon reflexes, was unremarkable.

Laboratory Results

Urine dipstick was normal and urine pregnancy test was again negative. A serum pregnancy test, performed at WM's request, was also negative. Because of the patient's unusual symptoms, prolactin level and TSH tests were sent to the main hospital lab. WM was sent home to follow up based on the test results. Both prolactin level 43.7 (6.0-20.0) and TSH 31.00 (0.36-3.74) were elevated. A referral to endocrinology was made to help determine the cause of these elevations.

Discussion

Many disease processes can mimic the signs or symptoms of pregnancy. Amenorrhea can be caused by premature ovarian failure, hypothyroidism, hyperthyroidism, polycystic ovarian disease, stress, weight change, exercise, and hyperprolactinemia. Abdominal mass or swelling can be the result of disorders such as constipation, tumor, or obstruction. Nausea, fatigue, and weight gain have numerous causes. When added to the sudden onset of galactorrhea years after WH's last pregnancy, a fourth pregnancy would have made sense.

A negative pregnancy test, however, mandates consideration of other causes. Although the patient's own diagnosis can often be helpful, care should be taken not to allow it to cloud the process of evaluating symptoms. When WM's symptoms were considered in view of her negative pregnancy test, a pituitary or other endocrine cause then led the differential.

Originally a pituitary cause such as an adenoma was considered. Pituitary adenomas may present as symptoms from the hormones they produce (prolactin, TSH, gonadotropins, etc.) or as symptoms from compression of adjacent tissue such as headache, visual changes, or decreased hormone production. Pituitary tumors comprise 10% of CNS tumors and are usually benign. Prolactinomas are the most common secretory tumor, followed by growth-hormone-secreting tumors. TSH-producing tumors are the most infrequent type.

Diagnosis depends on the type of tumor and symptoms present. Secretory tumors can be diagnosed by inappropriate increases in the hormones they produce. To confirm these and diagnose non-secretory-type tumors, an MRI with contrast is usually performed.

Tumors of the pituitary gland are treated based on their symptoms and whether they are causing symp-

toms secondary to compression. Most tumors are slow-growing. Possible treatments include surgery, radiation, or medications. Surgery is indicated when the tumor secretion is not easily controlled by medications or when the growth compresses adjacent structures, such as the optic nerves. Radiation is usually used as an adjunct to medications or surgery to help shrink the tumor mass. Medical therapy is only used for secretory tumors and is aimed at the specific hormone secreted. Prolactinomas are treated with dopamine agonists.

Although the possibility of a pituitary lesion initially made sense, several factors ultimately rendered it less likely. Most adenomas are single-hormone tumors. The level of prolactin was relatively low for a true adenoma, while the TSH was quite elevated. A third consideration is that the most likely differential for prolactinoma is primary hypothyroidism. The reason for this is that thyrotropin-releasing hormone (TRH) causes the release of prolactin as well as TSH. This better explains the patient's lab results.

Follow-up labs proved the free T4 to be very low, consistent with the final diagnosis of primary hypothyroidism. ■

References

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