Horse sense: Recognizing a rare diagnosis in primary care

There is an old adage in medical practice: when you hear hoof beats, think of horses, not zebras. In other words, any given clinical presentation will more than likely turn out to be a common disorder. In primary care medicine, esoteric diagnoses are relatively rare.

But sometimes when the sound of hoof beats returns in rapid succession, the clinician would do well to consider the possibility of a zebra in the forest.

I had known this 20-year-old woman her entire life. She had a history of asthma as a child, with intermittent breakthrough cough and wheezing episodes as an adolescent. She also manifested symptoms of anxiety and depression during her late adolescent years. Both of these diagnoses ran in the extended family as well.

I had seen her the previous month for a recurrence of her depression. She had been off medication for more than a year, functioning fine, when suddenly the symptoms of insomnia, fatigue, malaise, and anxiety hit. She agreed to see a counselor and begin a course of antidepressant therapy. Several weeks into this therapeutic regimen, she began to stabilize and feel better.

Her name appeared near the top of my Monday patient list. She came in complaining of shortness of breath. Her breathing was indeed shallow, but unlabored. Although I could discern no frank wheezing with auscultation, I elected to give her a treatment of a nebulized bronchodilator and observe her response. She told me that she felt better afterwards; and indeed, it seemed as though her tidal volume had improved.

I wrote out prescriptions for a common bronchodilator and an inhaled corticosteroid and handed them to her with instructions on how to take the medications. “You should begin to feel better in a couple of days,” I told her. “Give me a call to let me know how you’re doing.”

Two days later, she reappeared on my morning schedule, looking rather glum. “I feel worse,” she said. “It’s like I can’t catch my breath. It feels like there is something stuck in my throat.”

No improvement on bronchodilator therapy; a subjective feeling of a lump in the throat; a young woman with a history of anxiety and depression. Most likely globus hystericus, I thought—a psychiatric diagnosis.

“Let’s have a look,” I said, reaching for a tongue blade and a throat lamp. As I expected, the back of her throat was clear.

Her breaths were somewhat halting, but air moved in and out of both lungs equally with little effort. My ears tuned into the regular thump of her heartbeat in the background—but there was something odd.

I glanced at my wristwatch while I continued to listen to her heart beating inside her chest: 48 beats per minute—abnormally slow for a 20-year-old woman.

Any number of potential diagnoses surged through my mind. Could this be heart block, where the pacemaker signals were not being transmitted properly to the ventricles through the AV node? Could she have developed a spontaneous pneumothorax, a leak in the lung with accumulation of air in the pleural space?

I popped the stethoscope out of my ears and stood back for a moment to look at my patient. Curiously, although sad, she seemed to be in no overt distress. What was triggering this complex of symptoms?

“Tell me once more all the medications that you’re taking now,” I said. “There are the inhalers I prescribed the other day…”

“Yes,” she nodded, “and the antidepressant. That’s it.”

“Nothing else?”

She shrugged her shoulders. “Only birth control pills, but I’ve been taking them for the past 2 years.”

Of course; why hadn’t I thought to ask? Suddenly another thought popped into my head: could this be a pulmonary embolism triggered by the oral contraceptive hormonal therapy? Only further testing would elucidate the diagnosis.

“We need to have some additional tests run,” I explained to her, “a chest x-ray, a cardiogram, perhaps a scan of your lungs. The most expedient place to have everything done in a timely fashion is the emergency room.”

She nodded her head. “My mom can take me directly to the hospital.”

“Let me jot a note to the triage nurse for you to take along.”

I worked my way through the remainder of the patients on my morning schedule, while intermittent thoughts about my 20-year-old charge popped into my head: could this be a pulmonary embolism triggered by the oral contraceptive hormonal therapy? Only further testing would elucidate the diagnosis.

“We need to have some additional tests run,” I explained to her, “a chest x-ray, a cardiogram, perhaps a scan of your lungs. The most expedient place to have everything done in a timely fashion is the emergency room.”

She nodded her head. “My mom can take me directly to the hospital.”

“Let me jot a note to the triage nurse for you to take along.”

I worked my way through the remainder of the patients on my morning schedule, while intermittent thoughts about my 20-year-old charge popped into my head. Shortly before noon, a faxed report from the ED rested in my hands.

After obtaining a chest x-ray, a cardiogram, and a d-dimer test, what was the ED physician’s final impression? Asthma.

Not all hoof beats signify equinus vulgaris, the common horse. Occasionally, the clinician must consider what he thinks might be a zebra milling about—which, on closer inspection, could turn out to be merely a horse of a slightly different color.