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# When our biases derail the diagnosis

**T**his month's article by Dr. Yuen and colleagues on cognitive biases and the diagnostic errors that can result (see page 366) is a humbling reminder of the limitations of our brains and the need for us to be ever vigilant about the accuracy of our clinical diagnoses.

According to the article, at least 8 different kinds of bias can unintentionally derail our efforts to make the correct diagnosis. In my editorial last month (*J Fam Pract.* 2018;67:268), I presented data showing that up to 30% of patients with a physi-

**My partner saw the patient's myxedematous face and knew she had hypothyroidism—not hyperlipidemia.**

cian's diagnosis of asthma do not, in fact, have asthma. These mistaken diagnoses are most likely due to the bias known as "diagnostic momentum," which is the tendency of physicians to accept a diagnosis without questioning its validity.

**■ We are also prone to anchoring.** Because family physicians (FPs) are very busy and use type 1 reasoning (pattern recognition or intuitive reasoning) more frequently than type 2 reasoning (analytical thinking, which requires more time), I suspect we are most susceptible to the bias of premature closure of the diagnostic process, also called anchoring. At times we attach too much weight to preliminary findings and don't dig deep enough into the history or physical findings to confirm or support our diagnoses.

**■ A memorable example of my own cognitive bias** was my treatment of a middle-aged woman with hyperlipidemia. I thought I was being a good doctor, treating her appropriately with a statin. Luckily for her, she saw one of my partners when I was on vacation. My partner walked into the room and immediately recognized her myxedematous face as a sign of hypothyroidism. Her thyroid stimulating hormone level was 124 mIU/L. She was cured with thyroid hormone replacement and did not need a statin at all. I had not taken the time to think through the case carefully. And I had not noticed her gradual weight gain or the changes to her face.

**■ Lulled by common diagnoses.** Another difficulty for FPs and other primary care practitioners is that most of the patients we see have a common illness that is easy to diagnose. Recognizing shingles, eczema, acute appendicitis, and viral respiratory infections and managing chronic illnesses such as hypertension, diabetes, and chronic obstructive pulmonary disease (COPD) is second nature to us. But we must constantly be on the lookout for uncommon and potentially serious conditions. A classic example is not considering alpha-1 antitrypsin deficiency in a patient with COPD who does not smoke.

The bottom line: Take an extra minute or 2 to think through every diagnosis carefully—especially when one or more of the puzzle pieces do not fit together properly.

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