



Things Aren't Always What They Seem

A few years ago I decided to play a trick on one of our endocrine fellows, who at the time was only a few short weeks into her training. I had been tipped off that there was an inpatient with fairly profound symptoms related to an acute thyroid condition. So I took our intrepid, young fellow to the door outside the patient's room and advised her that the elderly gentleman inside had a severe disturbance in his thyroid function, which was entirely accurate. She poked her head in and saw a very sluggish and depressed-looking elderly man who barely looked in her direction when she called out to him. I then sprang my trap and asked her to opine, as a future endocrinologist, about the patient's condition, given that I had already told her the thyroid was clearly the culprit organ in his pathology. She beamed and told me that this was an obvious case of severe hypothyroidism, one of the worst she had ever seen (as if she had already encountered a multitude of severely hypothyroid patients!).

Imagine her dismay (and also my secret glee) when I informed her that the gentleman we were looking at actually had severe thyrotoxicosis due to Graves disease, the most common cause of thyrotoxicosis, even in elderly patients (multinodular toxic goiter is a close second in the elderly). What the fellow was not aware of is the frequent occurrence of a very atypical manifestation of hyperthyroidism in the elderly, known as masked hyperthyroidism, or apathetic hyperthyroidism. The gentleman we were looking at was, indeed, profoundly apathetic in his appearance, showing little, if any, interest in his

surroundings or in his visitors, the senior endocrinologist and the budding young neophyte.

Over the years I've found that even seasoned clinicians are, many times, unaware that the signs and symptoms of thyrotoxicosis, typically so striking in younger patients, can be very muted in the elderly. So allow me to use this soapbox to provide a bit of a minicourse on the thyrotoxic presentations that may be seen in the

Dr. Lahey used the term to describe certain elderly patients whose thyroid glands were relatively small and who lacked such typical hyperthyroid features as exophthalmos (bulging eyeballs), tachycardia, and smooth, moist skin. These patients didn't appear to be severely ill, but Dr. Lahey observed that, if they were subjected to significant physiologic stress, these fragile elderly patients could "quietly and peacefully sink into a coma and die."

Over the years I've found that even seasoned clinicians are, many times, unaware that the signs and symptoms of thyrotoxicosis, typically so striking in younger patients, can be very muted in the elderly.

elderly. It turns out that the hyperthyroid state can impose such a burden on the heart in elderly patients that the most prominent symptoms may be those of congestive heart failure. This phenomenon was first described by Levine and Sturgis in 1924, when they first used the term "masked hyperthyroidism" to designate elderly hyperthyroid patients who presented with heart failure symptoms. The cardiac symptoms were so predominant in these patients that the diagnosis of hyperthyroidism, the underlying cause of the heart failure, was at first completely overlooked.

Another widely used term for thyrotoxicosis in the elderly is "apathetic hyperthyroidism," first coined by Dr. Frank Lahey of the famed Lahey Clinic. The clinic got its start as a center for goiter surgery, as did the Cleveland Clinic, the Mayo Clinic, and the Ochsner Clinic (goiters were big, in more ways than one, in those days).

A later study from Bartels and Kingsley in 1949 found that only 24% of 124 elderly patients with hyperthyroidism showed the increased nervousness described by the authors as being "among the earliest and most consistent manifestations of the disease in younger patients." They went on to comment on the "relative infrequency of nervousness and emotionality" in these elderly patients with thyrotoxicosis. So it's important to know that the classic hyperadrenergic, agitated presentation, so typical of hyperthyroidism in younger patients, is encountered far less often in elderly patients who have the same metabolic derangement.

The moral of today's little minisession is to realize that patients don't read textbooks, an oft-repeated hoary aphorism meant to remind us all that atypical presentations of common diseases are often encountered. Indeed, one is considerably more likely to en-

counter an atypical presentation of a common disease than one is to encounter a typical presentation of an uncommon disease, simply because uncommon diseases occur, well, uncommonly. So it's important to always look for atypical presentations of a disease, especially if a senior clinician comes along and offers you what seems to be a gimme. ●

Author disclosures

The author reports no actual or potential conflicts of interest with regard to this article.

Disclaimer

The opinions expressed herein are those of the author and do not necessarily reflect those of Federal Practitioner, Quadrant HealthCom Inc., the U.S.

Government, or any of its agencies. This article may discuss unlabeled or investigational use of certain drugs. Please review complete prescribing information for specific drugs or drug combinations—including indications, contraindications, warnings, and adverse effects—before administering pharmacologic therapy to patients.