



## The Many Faces of Thyroid Disease in Elderly Patients

Most clinicians are likely to express confidence in their ability to recognize and diagnose states of thyroid overactivity or underactivity. After all, the classic presentations of hyperthyroidism and hypothyroidism are quite distinctive. The hyperthyroid patient is sweaty, jumpy, irritable, and intolerant of heat and often has bulging eyes related to Graves' ophthalmopathy. The hypothyroid patient, on the other hand, is puffy, sluggish, slow moving, lethargic, and edematous.

The trouble is that these thyroid stereotypes don't hold up as well in older patients as they do in younger ones. Indeed, even the younger patient with hyperthyroidism or hypothyroidism may "fail to read the textbook" and may not display many of the classic thyroid symptoms. For this reason, it's important for providers, especially those treating elderly patients, to be aware of other, more subtle clues that can signal a thyroid problem.

Among older patients with hypothyroidism, these clues can include:

- unexplained elevations in plasma cholesterol or triglyceride levels, related to reduced uptake of lipids by tissues lacking in thyroid hormone;
- fecal impaction, due to the retarded movement of stool through the bowel;
- macrocytic anemia, which can result either directly from the hypothyroidism itself or from associated autoimmune pernicious anemia;
- vague arthritic symptoms, which may be the primary presenting feature; and
- psychiatric disturbances, especially depression.

This last category of symptoms is particularly important since psychiatric manifestations of hypothyroidism

are quite prevalent among the elderly. Although these changes in mentation have been termed "myxedema madness," frank psychosis is far less common than depression in this population. Other age-related central nervous system manifestations include syncope, seizures, and impaired cerebellar function.

At the other end of the spectrum, Bartels and Kingsley found in 1949 that only 16% of 124 elderly patients with hyperthyroidism showed the increased nervousness typically seen in younger patients.<sup>1</sup> They noted that "the relative infrequency of nervousness and emotionalism is indicative of the altered response of the elderly to hyperthyroidism."

Indeed, even earlier, Frank Lahey of the Lahey Clinic had coined the term "apathetic hyperthyroidism" to describe the condition in older patients whose thyroid glands are small and who lack such typical features as exophthalmos; tachycardia; and smooth, moist skin.<sup>2</sup> While these patients don't appear severely ill, Lahey wrote that if such individuals were subjected to physiologic stress, the most fragile among them could "quietly and peacefully sink into coma and die."

An elderly patient with hyperthyroidism is much more likely than a younger one to present in an apathetic and depressed mental state. Although weight loss can be a prominent symptom of hyperthyroidism in an older patient, it is as likely to reflect reduced food intake as increased catabolism resulting from the excess thyroid hormone. Such patients often appear sad and lethargic and display little interest in either themselves or their surroundings.

It also has been observed that, in older patients, the hyperthyroid state can burden the heart to such a degree

that the most prominent symptoms may be those of congestive heart failure (CHF). This phenomenon was first described in 1924 by Levine and Sturgis, who used the term "masked hyperthyroidism" to refer to elderly hyperthyroid patients who presented with CHF.<sup>3</sup> The cardiac symptoms so predominated in these patients that the underlying hyperthyroidism was overlooked initially.

Given these atypical and often subtle presentations, it's critical for clinicians to maintain a low threshold for suspecting hypothyroidism or hyperthyroidism in older patients. Many older patients out there have these conditions, but they don't announce themselves nearly as loudly and clearly as do their younger counterparts. ●

### Author disclosures

Dr. Felicetta reports no actual or potential conflicts of interest with regard to this editorial.

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### REFERENCES

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