

Hyperthyroidism in Aging

PREVALENCE OF HYPERTHYROIDISM IN AGING

Hyperthyroidism in the elderly is a serious clinical problem both for the individual and for health services which must fund associated costs. Hyperthyroidism is known to be a common disorder (1), a population-based survey reported by Tunbridge et al (2) conducted 30 years ago revealed a prevalence in the general population in the UK of around 2.7% in females (10-fold less in males) and of undiagnosed disease in around 0.5% of women. A more recent population-based survey in the United States revealed a prevalence of hyperthyroidism of 1.3%, with no difference between men and women (3). This prevalence decreases to 0.4% if one excludes patients with known thyroid disease and those taking thyroid hormone preparations, indicating that many cases of hyperthyroidism are due to overtreatment with exogenous thyroid hormone. In fact, one recent study indicated that over 40% of older subjects taking thyroid hormone had low TSH levels, indicating excess thyroid hormone doses (4).

A number of studies have reported on the prevalence of hyperthyroidism specifically in elderly populations. Prevalence rates vary depending on whether patients taking thyroid hormone are included, but most surveys report that approximately 1 – 3% of subjects over the age of 60-65 years have hyperthyroidism (2,3,5-8). If one excludes patients taking thyroid hormone, prevalence rates of hyperthyroidism appear similar in younger and older populations (3).

SYMPTOMS AND SIGNS OF HYPERTHYROIDISM

Classical symptoms and signs of thyrotoxicosis are shown in Table 1 (1). While some or all of these may be present in elderly subjects with thyrotoxicosis, the clinical picture is often significantly different in this age group (9). Problems such as weight loss and depression or agitation may predominate - so-called "apathetic" thyrotoxicosis, a condition in which more typical symptoms and signs reflecting sympathetic activation such as tremor and hyperactivity are absent (10-12). Instead, cardiovascular symptoms and signs often predominate in older patients, including atrial fibrillation. Other findings more common in older patients with hyperthyroidism include fatigue, anorexia, weight loss, apathy, agitation, or cognitive decline (11-14). Particularly in this age group, the diagnosis of thyrotoxicosis should also be considered in the presence of other symptoms and signs considered "non-specific" in nature, such as muscle weakness, persistent vomiting, hypercalcemia, and worsening osteoporosis.

Table 1. SYMPTOMS AND SIGNS IN HYPERTHYROIDISM