

Five Things Physicians and Patients Should Question

1 Don't recommend routine or multiple daily self-glucose monitoring in adults with stable type 2 diabetes on agents that do not cause hypoglycemia.

Once target control is achieved and the results of self-monitoring become quite predictable, there is little gained in most individuals from repeatedly confirming this state. There are many exceptions, such as acute illness, when new medications are added, when weight fluctuates significantly, when A1c targets drift off course and in individuals who need monitoring to maintain targets. Self-monitoring is beneficial as long as one is learning and adjusting therapy based on the result of the monitoring.

2 Don't routinely order a thyroid ultrasound in patients with abnormal thyroid function tests unless there is a palpable abnormality of the thyroid gland.

Thyroid ultrasound is used to identify and characterize thyroid nodules, and is not part of the routine evaluation of abnormal thyroid function tests (over- or underactive thyroid function) unless the patient also has a large goiter or a lumpy thyroid. Incidentally discovered thyroid nodules are common. Overzealous use of ultrasound will frequently identify nodules, which are unrelated to the abnormal thyroid function, and may divert the clinical evaluation to assess the nodules, rather than the thyroid dysfunction. Imaging may be needed in thyrotoxic patients; when needed, a thyroid scan, not an ultrasound, is used to assess the etiology of the thyrotoxicosis and the possibility of focal autonomy in a thyroid nodule.

3 Don't use Free T4 or T3 to screen for hypothyroidism or to monitor and adjust levothyroxine (T4) dose in patients with known primary hypothyroidism.

T4 is converted into T3 at the cellular level in virtually all organs. Intracellular T3 levels regulate pituitary secretion and blood levels of TSH, as well as the effects of thyroid hormone in multiple organs. Therefore, in most people a normal TSH indicates either normal endogenous thyroid function or an adequate T4 replacement dose. TSH only becomes unreliable in patients with suspected or known pituitary or hypothalamic disease when TSH cannot respond physiologically to altered levels of T4 or T3.

4 Don't prescribe testosterone therapy unless there is biochemical evidence of testosterone deficiency.

Many of the symptoms attributed to male hypogonadism are commonly seen in normal male aging or in the presence of comorbid conditions. Testosterone therapy has the potential for serious side effects and represents a significant expense. It is therefore important to confirm the clinical suspicion of hypogonadism with biochemical testing. Current guidelines recommend the use of a total testosterone level obtained in the morning. A low level should be confirmed on a different day, again measuring the total testosterone. In some situations, a free or bioavailable testosterone may be of additional value.

5 Don't routinely test for Anti-Thyroid Peroxidase Antibodies (anti – TPO).

Positive anti-TPO titres are not unusual in the 'normal' population. Their presence in the context of thyroid disease only assists in indicating that the pathogenesis is probably autoimmune. As thyroid autoimmunity is a chronic condition, once diagnosed there is rarely a need to re-measure anti-TPO titres. In euthyroid pregnant patients deemed at high risk of developing thyroid disease, anti-TPO antibodies may influence the frequency of surveillance for hypothyroidism during the pregnancy. It is uncommon that measurement of anti-TPO antibodies influences patient management.

How the list was created

In 2013, the Canadian Society of Endocrinology and Metabolism (CSEM) created a Quality Improvement Committee and charged it with the task of collaborating with *Choosing Wisely Canada* to establish recommendations relevant to the care of endocrine and metabolic disorders. The committee has a membership of 8 practicing endocrinologists from across Canada and whose combined clinical experience is well in excess of 100 practice-years. A survey to solicit suggestions for areas of practice that would fit with CWC's mandate was sent to all members of CSEM. The results were discussed by the committee and grouped and crafted into a short list of recommendations (and examined for alignment with the US Choosing Wisely initiative). The recommendations list was also informed by data about utilization from parts of Canada and an understanding of the frequency with which endocrine disorders occur. The short list was then subjected to a modified Delphi process for ranking and the 5 recommendations selected had the highest mean priority score and the most consistency of opinion for committee members. They were finally agreed upon by consensus. Recommendations 1, 2, and 4 were adopted from the 2013 Five Things Physicians and Patients Should Question list with permission from the Endocrine Society.

Sources

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About Choosing Wisely Canada

Choosing Wisely Canada is a campaign to help physicians and patients engage in conversations about unnecessary tests, treatments and procedures, and to help physicians and patients make smart and effective choices to ensure high-quality care.

For more information on *Choosing Wisely Canada* or to see other lists of Five Things Physicians and Patients Should Question, visit www.choosingwiselycanada.org. Join the conversation on Twitter @ChooseWiselyCA.

About The Canadian Society of Endocrinology and Metabolism

The Canadian Society of Endocrinology and Metabolism (CSEM) is a proud partner of the *Choosing Wisely Canada* campaign. CSEM is a professional organization bringing together academic and community-based endocrinologists and researchers engaged in providing health care, education and research within the broad domain of endocrinology. The CSEM is a national advocate for excellence in endocrinology research, education, and patient care, and its mandate is to advance the discipline of endocrinology and metabolism in Canada.