

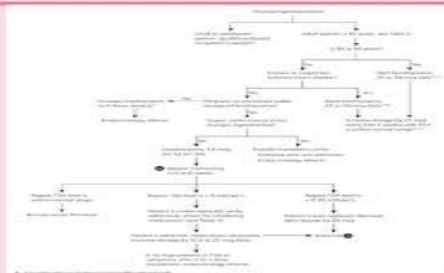
# HYPOTHYROIDISM



A condition in which there is an underproduction of thyroid hormone by the thyroid gland, or resistance to the action of the thyroid hormone. The primary cause of hypothyroidism is Hashimoto's thyroiditis. This disorder is more common in people over age 40, women more frequently than men and people over 65. Common presenting symptoms are fatigue, weight gain, intolerance to cold, constipation, muscle cramps, dry skin, atrophic or enlarged thyroid gland, and depression (Hollier, 2018).

## DIAGNOSTIC CRITERIA

Measuring the serum TSH is the gold standard test for initial evaluation of suspected hypothyroidism or as part of routine screenings. If the TSH is elevated then a repeat TSH should be done along with a serum T4 level. A patient that has a TSH >5.5 and a low T4 below normal is diagnosed with hypothyroidism (Gaitoinda et al, 2012).



## PHARMACOLOGICAL TREATMENT

For most patients, treatment will be lifelong with L-thyroxine. L-thyroxine remains the recommended treatment according to clinical practice guideline (Garber et al., 2012). For patients, less than 50 with no other conditions dose of levothyroxine will be 1.6mcg/kg. For patients older than 50 or patients with cardiac conditions treatment will begin at 25-50mcg/day (Gaitoinda et al., 2012).

## ON GOING MANAGEMENT

After treatment is initiated patients will need to have a TSH level drawn in 6 weeks and then every 6-8 weeks until they are at goal a TSH of 0.5-5.0. After patients reach goal TSH levels, labs can be done annually (Hollier, 2018).



## BARRIERS/ISSUES WITH TREATMENT

The frequent monitoring of TSH levels initially when L-thyroxine is initiated may be a challenge for some patients and could lead to non-compliance. Also, patients should be instructed to take medication on an empty stomach before meals first thing in the morning before breakfast or in the evening. If they do not take their medication correctly, it could lead to difficulty in reaching a euthyroid state.

## CLINICAL PRACTICE GUIDELINES

The most current clinical practice guidelines were used for this infographic. The most recent clinical practice guidelines from The American Association of Family Physicians and the American Association of Clinical Endocrinology are from 2012. Full reference list on the following page.

## GUIDELINES

