

AMIODARONE

Identifying patients at risk for amiodrone-induced hypothyroidism (AIH)

Amiodarone can cause hypothyroidism, which is more commonly seen in patients from iodine sufficient areas such as North America, South America, and parts of Europe (in gray).



This is due to failure to escape from the Wolff-Chaikoff effect. The increased iodine associated with amiodarone treatment blocks thyroid hormone production. However, as intrathyroidal iodine levels drop, the thyroid is unable to resume normal thyroid hormone production.

This typically occurs within the first 18 months of therapy, and is diagnosed with an elevated TSH on lab tests. Patients with underlying thyroid autoimmunity (positive TPO antibodies) are at highest risk.

It is important to monitor thyroid labs every six months while patients are on amiodarone to detect thyroid dysfunction. It is also useful to check TPO antibodies at baseline to evaluate patient's risk for developing amiodarone-induced hypothyroidism.

