# MANAGEMENT OF MYXEDEMA COMA

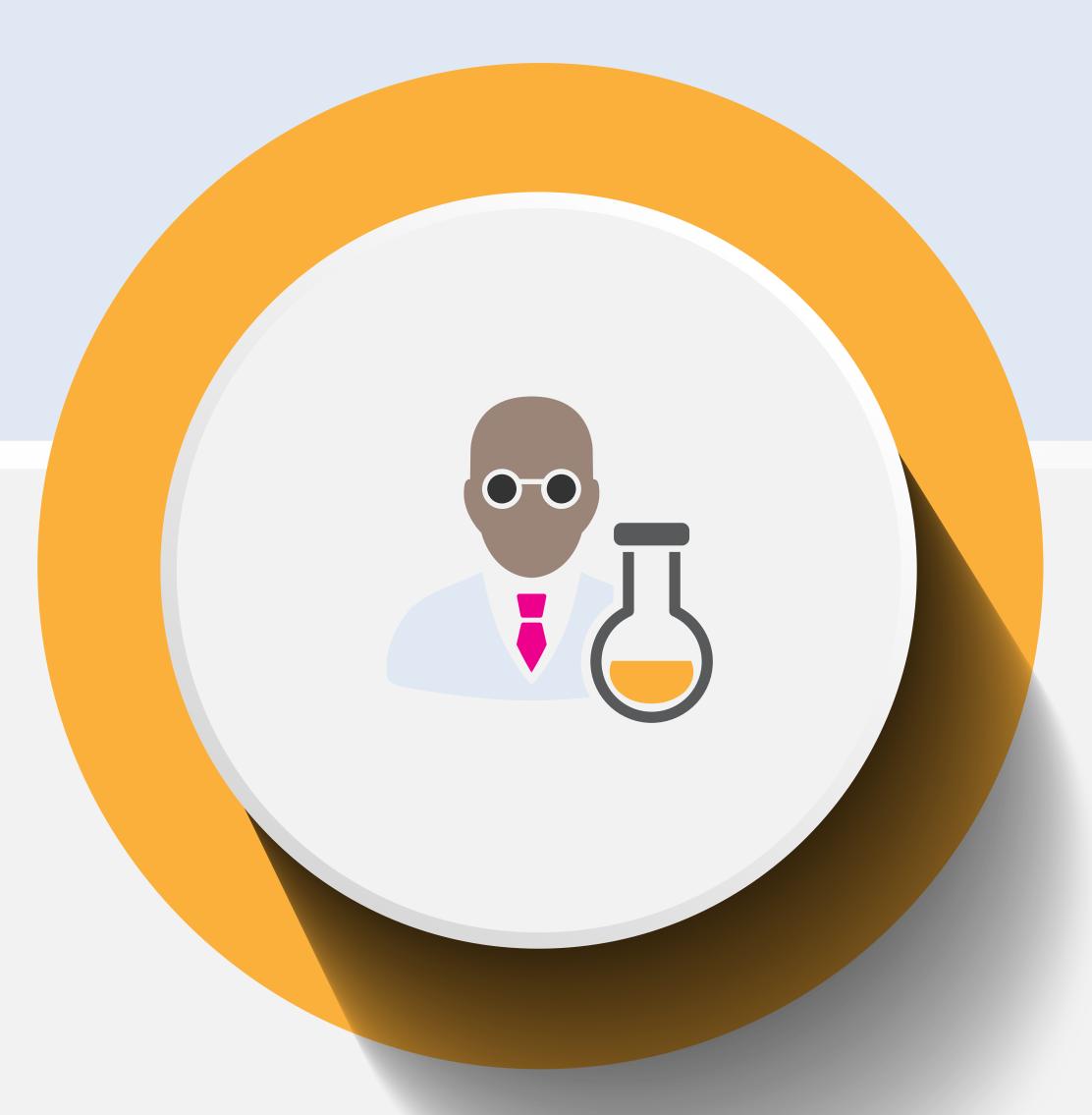


Severe hypothyroidism leading to slowing of function in multiple organs.



#### CLINICAL FEATURES

- -Decreased mental status (lethargy, stupor, or coma).
- -Hypothermia.
- -Bradycardia.
- -Hyponatremia.
- -Hypoglycemia.
- -Hypotension.
- -May observe nonpitting edema leading to puffiness in the hands and face, thickening of the nose, swelling of the lips, and enlargement of the tongue.



#### DIAGNOSIS

- -Possible presence of a thyroidectomy scar or a history of radioiodine therapy or hypothyroidism.
- -The serum T4 concentration (FT4) is usually very low.
- -TSH may be high (primary hypothyroidism), or it may be low, normal, or slightly high (central hypothyroidism).
- -Serum cortisol level.



### TREATMENT

- -Levothyroxine 200 to 400 mcg intravenously, followed by daily doses of 50 to 100 mcg.
- -Triiodothyronine 5 to 20 mcg intravenously, followed by 2.5 to 10 mcg every eight hours.
- -Change to an appropriate oral dose of levothyroxine when the patient can tolerate oral medications. (Oral dose is approximately the intravenous dose divided by 0.75).
- Hydrocortisone 100 mg intravenously every eight hours until exclusion of possible adrenal insufficiency.



## SUPPORTIVE CARE

- -Mechanical ventilation if necessary.
- -Fluids and vasopressor drugs to correct hypotension.
- -Passive rewarming.
- -Judicious administration of intravenous fluids including electrolytes and glucose.
- Consider empirical antibiotic treatment as indicated.
- Monitor for arrhythmias and treat when indicated.
- -FT4 and T3 every 1-2 days.
- -TSH in one week.