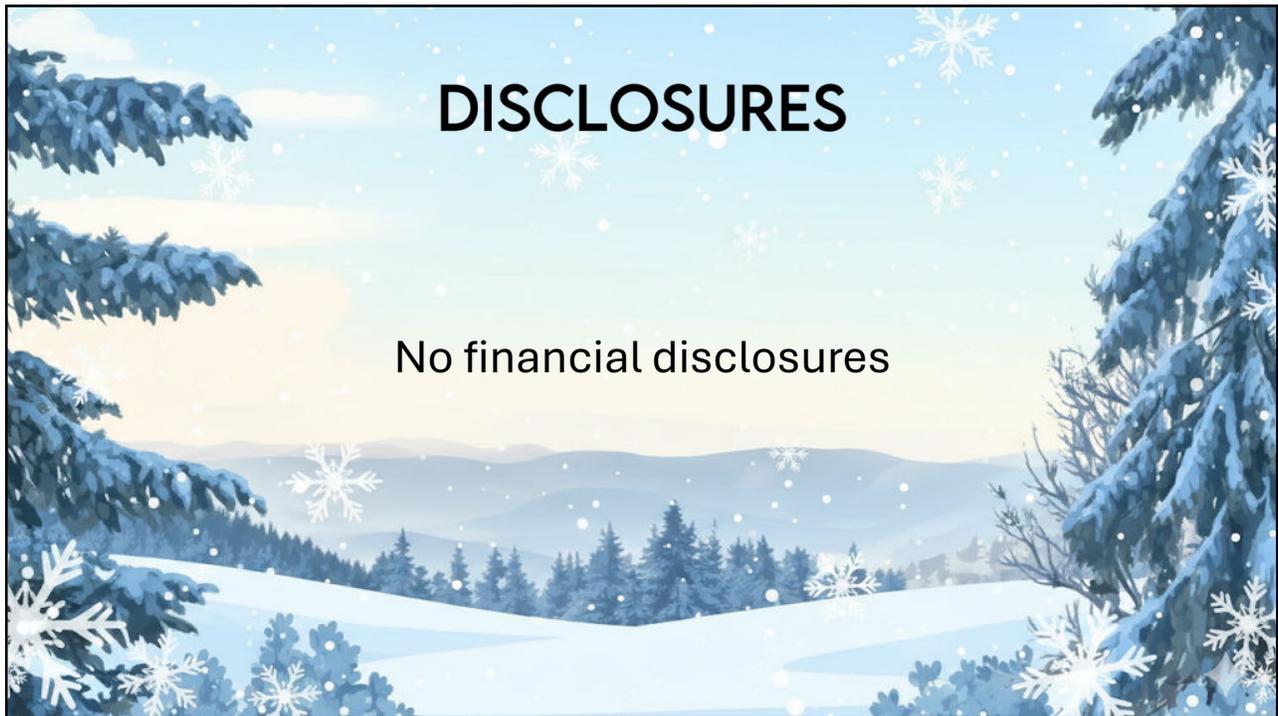
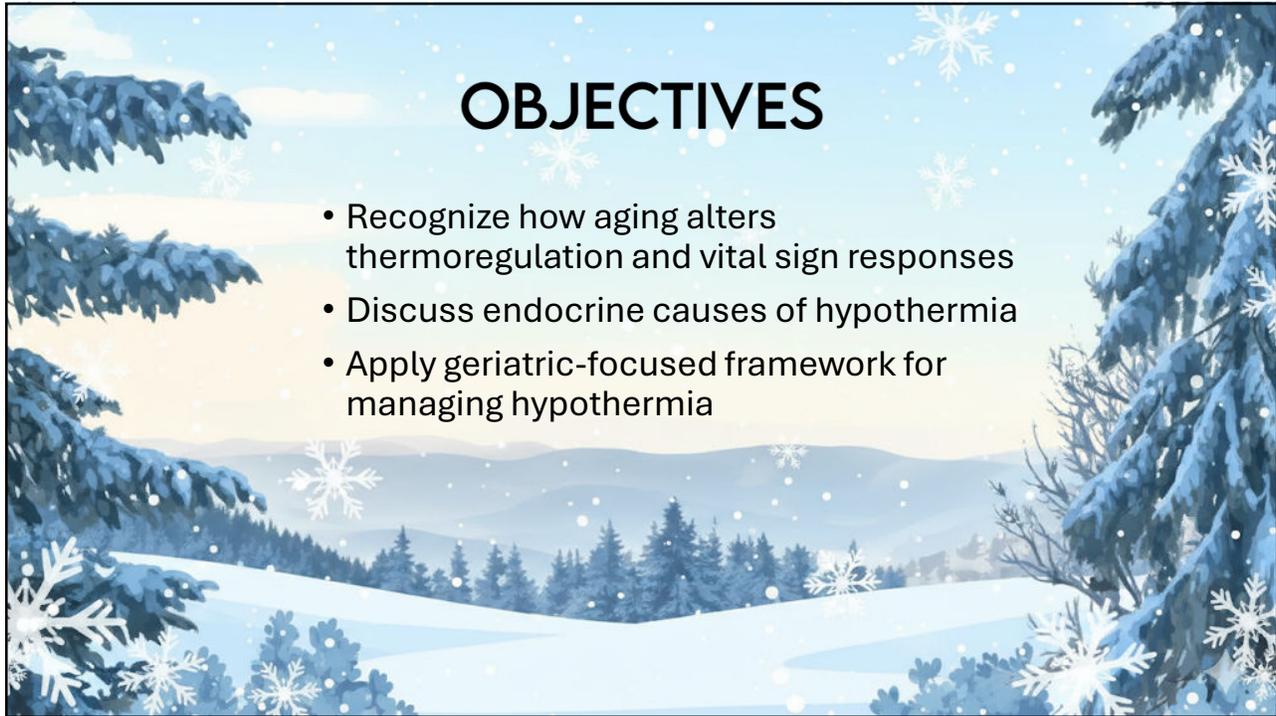


1



2



OBJECTIVES

- Recognize how aging alters thermoregulation and vital sign responses
- Discuss endocrine causes of hypothermia
- Apply geriatric-focused framework for managing hypothermia

3

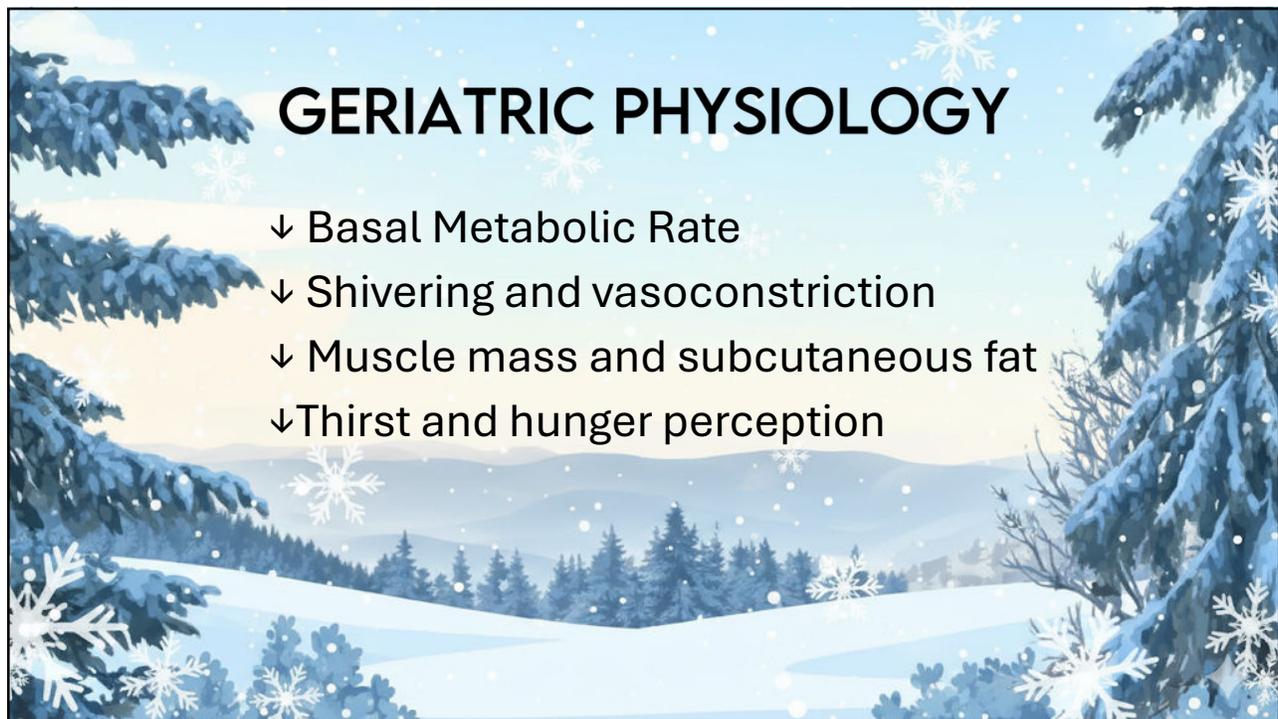


“ALTERED MENTAL STATUS”

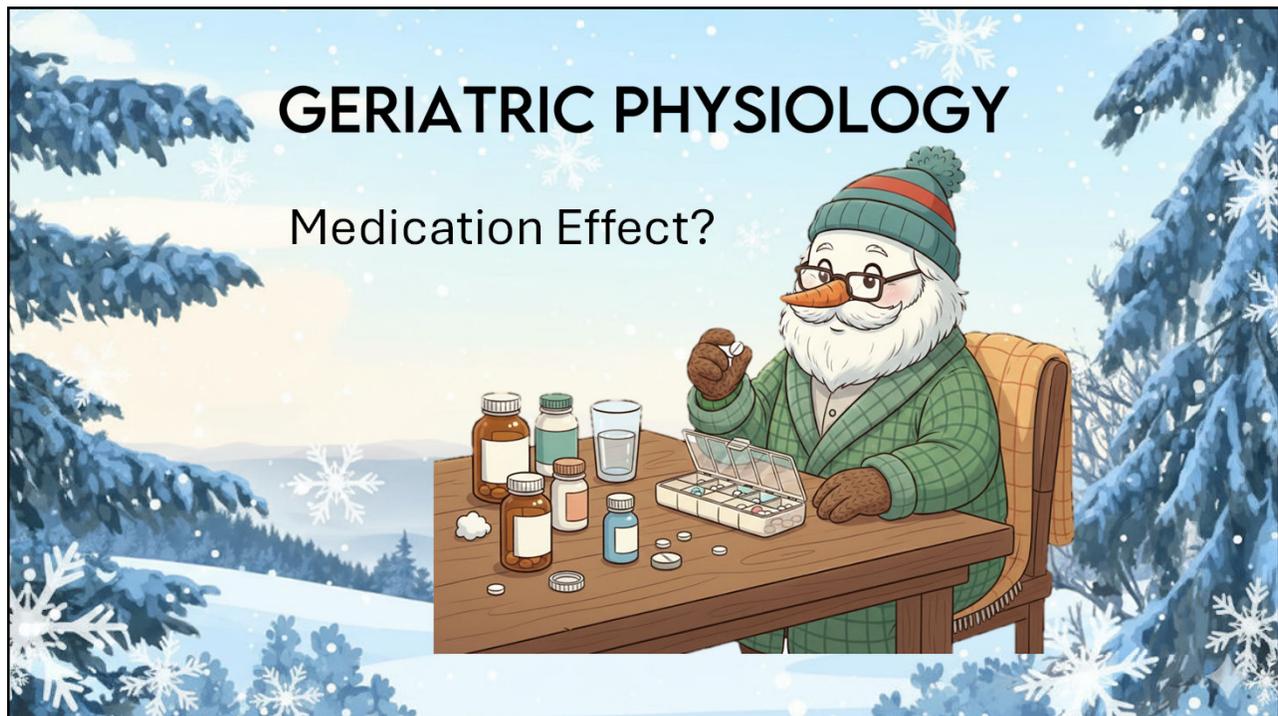
82-year-old male who has not been seen recently by neighbors

T 35.5°C HR 52 BP 108/60
RR 12 Sat 98% on Room Air

4



7



8

TEMPERATURE

- ~~Fever = 38°C (100.4°F)~~
- Infectious Disease Society of America (IDSA)
 - Single oral temp > 37.8°C (100.0°F)
 - Repeated oral temp > 37.2°C (99.0°F)
 - Repeated rectal temp > 37.5°C (99.5°F)

9

TEMPERATURE'S EFFECT ON DIAGNOSTICS

- Vital Signs
- Blood Gas
- Electrocardiogram



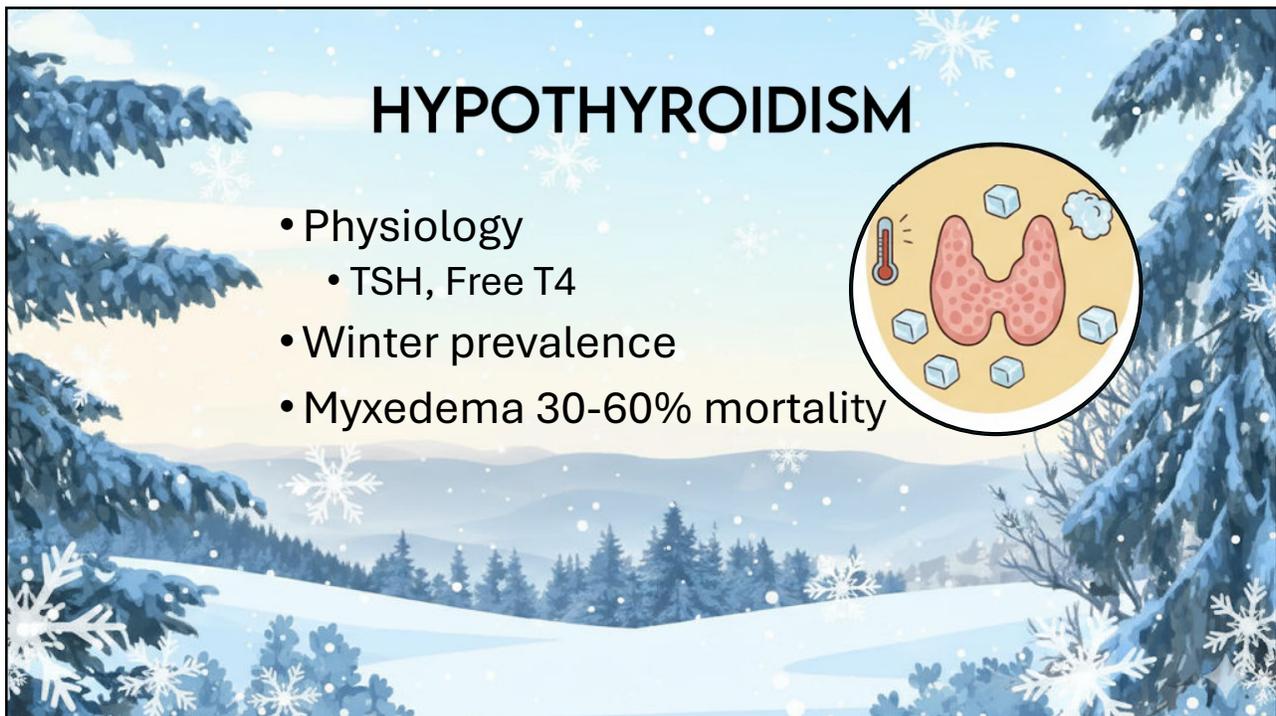
The image displays a 12-lead electrocardiogram (ECG) tracing on a standard grid. The leads are arranged in three rows: I, II, III; aVR, aVL, aVF; and V1, V2, V3; V4, V5, V6. Black arrows point to the ST-segment in leads V1, V2, V3, V4, and V5, which shows a downward slope (ST-segment depression), a finding often associated with myocardial ischemia or infarction.

10



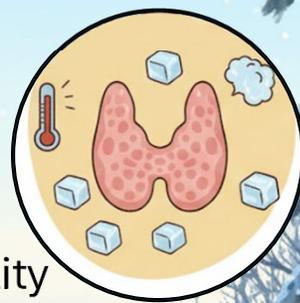
ENDOCRINE DISORDERS

11



HYPOTHYROIDISM

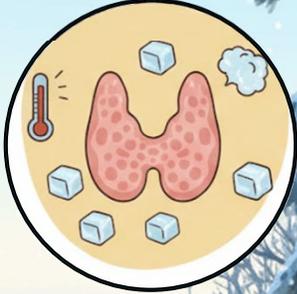
- Physiology
 - TSH, Free T4
- Winter prevalence
- Myxedema 30-60% mortality



12

HYPOTHYROIDISM

- Passive rewarming
- Consider triggers
- Levothyroxine (T4)
- Corticosteroids

A circular inset illustration on a yellow background shows a red, butterfly-shaped thyroid gland. It is surrounded by several white ice cubes and a red thermometer with a white scale, indicating a low temperature. The background of the slide is a winter landscape with snow-covered evergreen trees and mountains under a blue sky with falling snow.

13

ADRENAL INSUFFICIENCY

- Physiology
- Persistent hypotension
- Check medications

A circular inset illustration on a yellow background shows two brown kidneys. Each kidney has a small, red, triangular adrenal gland sitting on top of it. The background of the slide is a winter landscape with snow-covered evergreen trees and mountains under a blue sky with falling snow.

14

ADRENAL INSUFFICIENCY

- Stress dose steroids
- Consider triggers

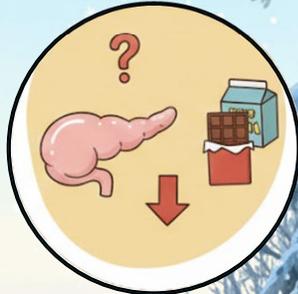


The slide features a winter-themed background with snow-covered evergreen trees and distant mountains under a light blue sky with falling snow. The title 'ADRENAL INSUFFICIENCY' is centered at the top. Below it, two bullet points are listed. To the right, a circular inset shows a pair of brown kidneys with red adrenal glands on top, set against a yellow background.

15

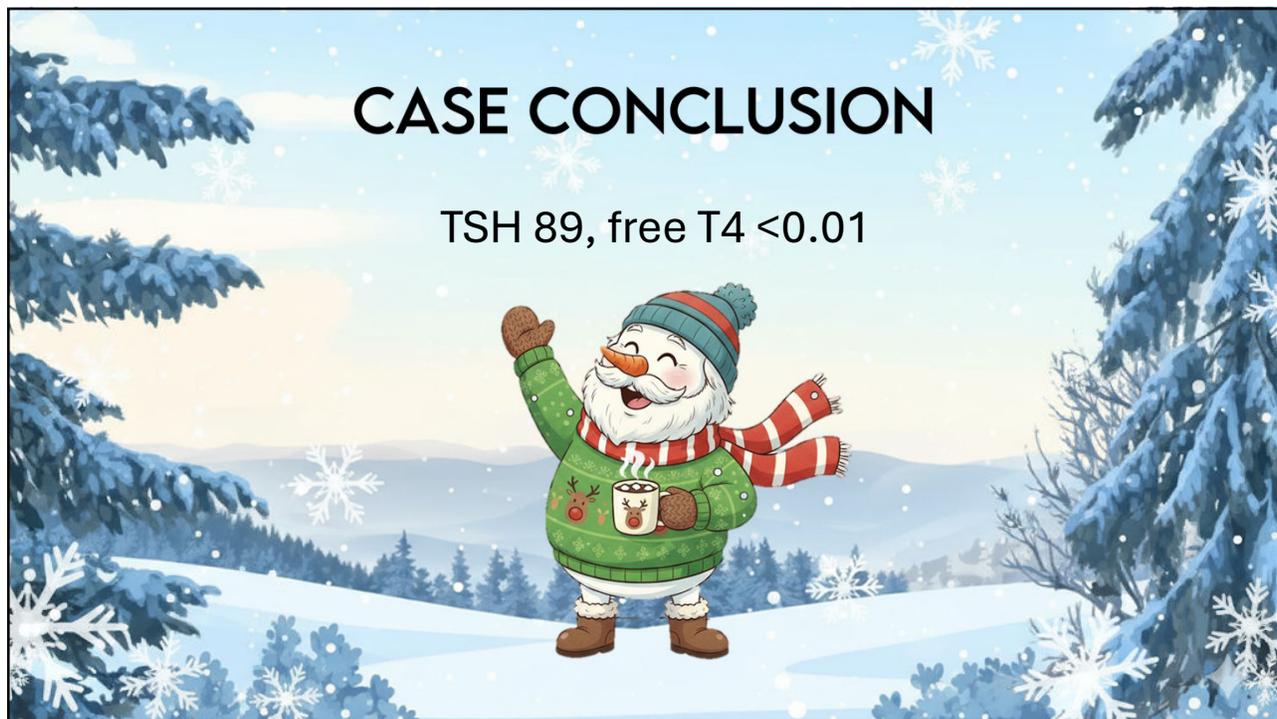
HYPOGLYCEMIA

- Physiology
- MEDICATIONS
- Inciting Event

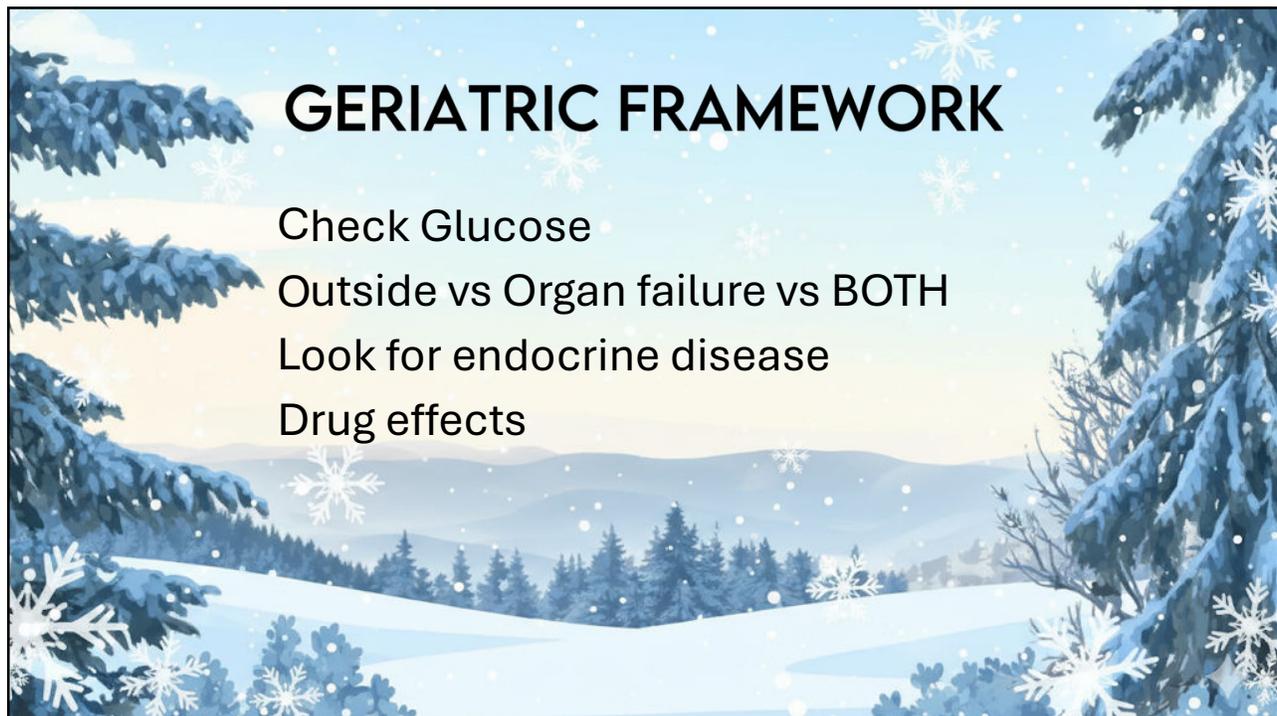


The slide features the same winter-themed background as the previous slide. The title 'HYPOGLYCEMIA' is centered at the top. Below it, three bullet points are listed. To the right, a circular inset shows a pink pancreas, a red question mark, a box of chocolate, and a carton of milk, with a red arrow pointing downwards from the question mark.

16



17



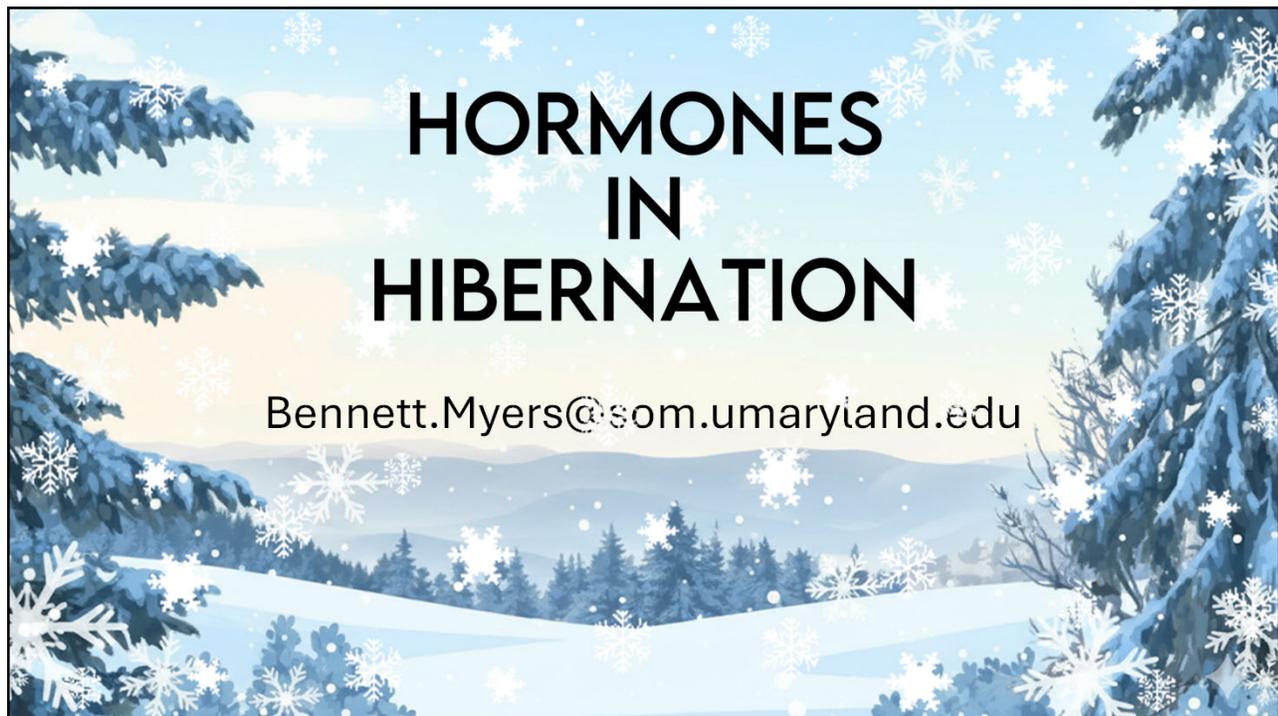
18



CLINICAL PEARLS

- Overlapping environmental/endocrine presentations
- Passive rewarming in hypothyroidism
- Both hypothyroidism and adrenal insufficiency are associated with hyponatremia
- Overlapping hypothyroid and adrenal insufficiency

19



HORMONES IN HIBERNATION

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