Show Notes: Episode 7 In the clinic – Tired Patient

Questions discussed in the podcast:

- 1. With the limited information, please select the most likely cause and 2 next most likely diagnoses.
 - a) Hypothyroidism
 - b) Depression
 - c) Anemia
 - d) Lyme Disease
 - e) Chronic Fatigue Syndrome

For every 100,000 people, the prevalence of each condition in Canada is

- Depression occurs in 12,000*
- Hypothyroidism occurs in 2000-6000*
- Iron Deficiency Anemia (females) occurs in ~4000*
- Chronic Fatigue Syndrome occurs in ~200*
- Lyme disease occurs in ~0.4-2.7

- 2. How helpful are thyroid symptoms in making the diagnosis of hypothyroidism
 - a) Very Helpful
 - b) Moderately helpful
 - c) Generally not helpful

Individual hypothyroid symptoms: Sensitivity 3-38%

Positive predictive value 8-12%.

- -All symptoms + severity:
- 3.6 likelihood ratio

25,862 people: 9.5% elevated TSH - ¾ subclinical (TSH 5-10) and ¼ overt hypothyroid (TSH >10).

	Euthyroid	Overt Hypothyroid
No Symptoms	40%	28%
≥ 4 Symptoms	18%	26%

^{*} The prevalence is higher in women

- 3. What two questions can help rule-out depression (pick the 2 best choices). During the past months have you often been bothered by,...
 - a) Feeling down, depressed or hopeless?
 - b) Thoughts of self-harm?
 - c) Having little interest or pleasure in doing things?
 - d) Feelings of being tired, fatigued or sleepy?
 - e) Troubles with concentration or staying focused?

3 primary care diagnostic studies (1893 pts):

- Both questions negative: Sensitivity is 96-97% (~96%)
- One or both positive: specificity is 57-78% (~70%)
- Negative likelihood ratio=0.06 and positive=3.2

Plan:

Jennifer is reluctant to accept depression as the cause. "I'll think about it"

Order - TSH, CBC and ferritin.

Offer some sleep hygiene advice (web-site)

Set a recall in 1-2 weeks and send a note to staff that Jennifer be given PHQ-9 when she arrives for her next visit.

References & Links:

https://www.anxietycanada.com/sites/default/files/SleepHygiene.pdf

https://www2.gov.bc.ca/assets/gov/health/practitioner-pro/bc-guidelines/depression_patient_health_questionnaire.pdf

Likely Diagnosis (prevalence). Depression: Can J Psychiatry. 2006 Feb;51(2):84-90. hypothyroidism: Can Fam Physician 2020, 66(3): 188. anemia: https://www150.statcan.gc.ca/n1/pub/82-003-x/2012004/article/11742/tbl/tbl2-eng.htm Lyme https://www.canada.ca/en/public-health/services/diseases/lyme-disease/surveillance-lyme-disease.html Also, UpToDate for all (and Chronic Fatigue). Hypothyroid symptoms: Arch Intern Med. 2000 Feb 28;160(4):526-34. Depression Screen: Finley CR, Kolber MR. Tools for Practice, 2018 January 15. #203 https://gomainpro.ca/wp-content/uploads/tools-for-practice/1515521430 tfp2032-questionscreenfv.pdf