

FATIGUE



3RD YEAR FAMILY MEDICINE CLERKSHIP ROTATION
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LEARNING OBJECTIVES: FATIGUE

- **Mood Disorders**

- List the symptoms of a patient suffering from depression after completing a medical history.
- Discuss available psychological and prescription drug treatments for depression.
- Identify depressed patients who need special care.

- **Diseases/Disorders of the Endocrine System**

- Describe the clinical symptoms of patients suffering from hypothyroidism or hyperthyroidism after completing a medical history and physical examination.
- Identify useful tests for the diagnosis of hypothyroidism and hyperthyroidism.
- Discuss the pharmacological treatment for hypothyroidism and hyperthyroidism.
- Identify patients with hypothyroidism or hyperthyroidism that need specialist consultation.

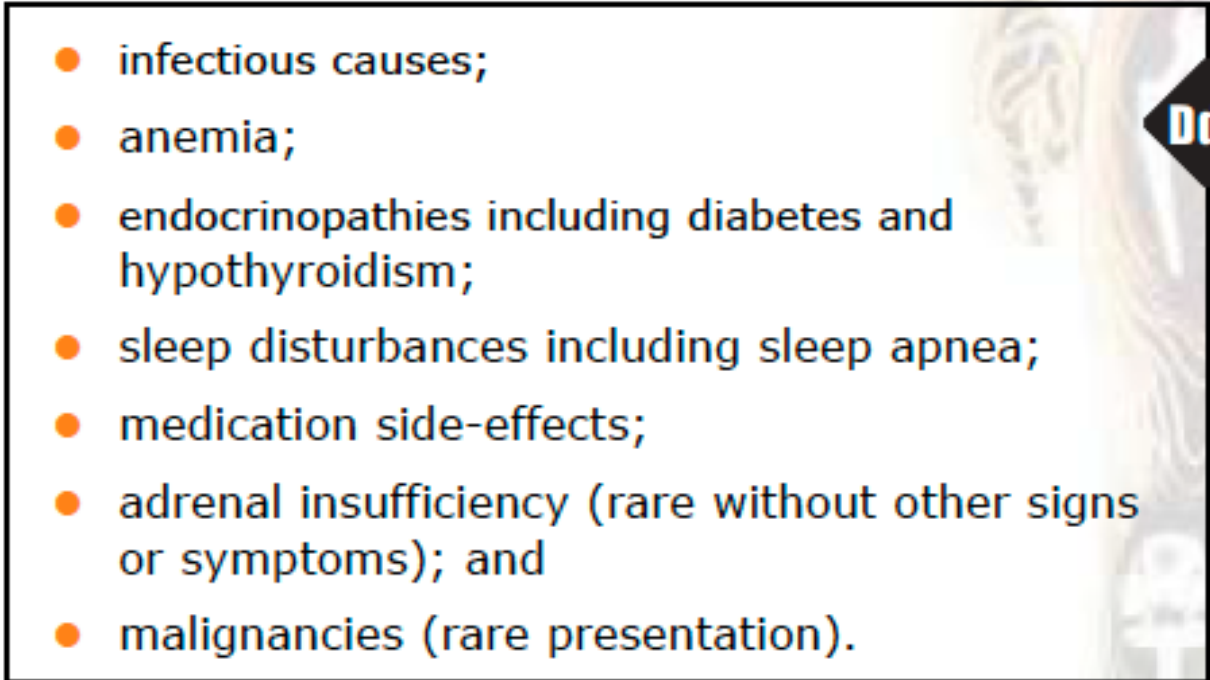
LEARNING OBJECTIVES: FATIGUE

- **Sleep Disorders**

- List the etiologies for insomnia.
- Demonstrate the ability to perform an appropriate medical history in the context of insomnia.
- Discuss how physical health and mental health contribute to a patient's insomnia.
- Describe non-pharmacological measures for managing insomnia.
- Recognize the signs and symptoms of sleep apnea.
- Recognize the medico-legal implications of sleep apnea.
- Describe pharmacological options for the treatment of insomnia to the patient, including hypnotics and sedatives.

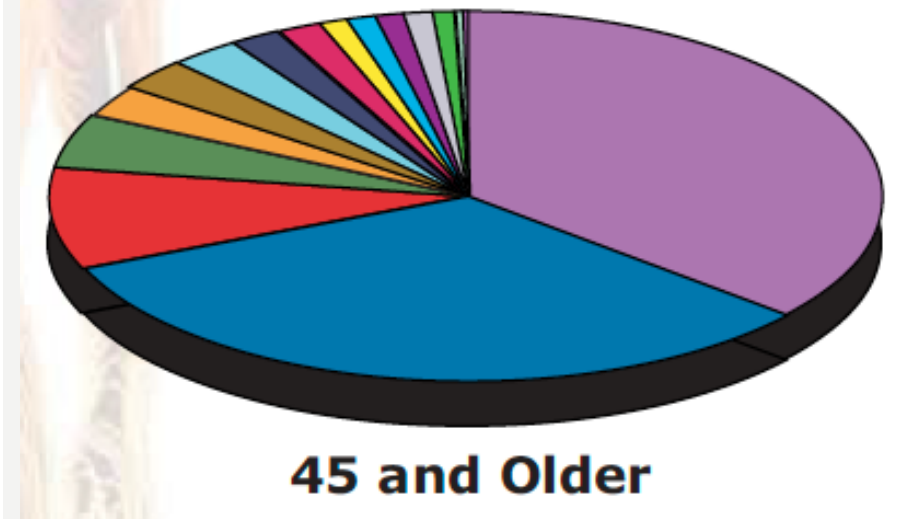
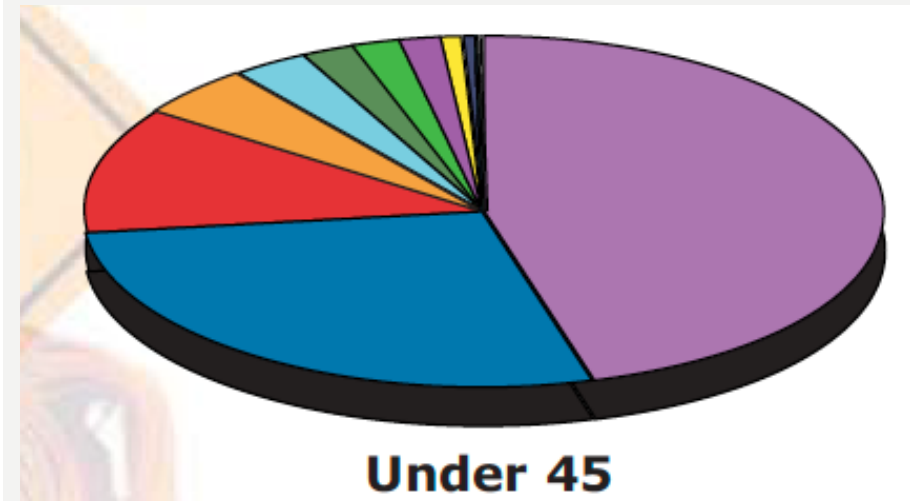
FATIGUE IN PRIMARY CARE

- Our role: organic vs non-organic?
 - Fatigue from organic disease is constant, relieved by REST
 - Fatigue from mental health disorders is often improved by exercise and not relieved by rest
- Only 15% of patient in primary care with fatigue had organic causes
 - R/o common organic causes, don't over-investigate

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- infectious causes;
 - anemia;
 - endocrinopathies including diabetes and hypothyroidism;
 - sleep disturbances including sleep apnea;
 - medication side-effects;
 - adrenal insufficiency (rare without other signs or symptoms); and
 - malignancies (rare presentation).

FATIGUE IN PRIMARY CARE

	AGE	
	Under 45	45 and Older
Fatigue NYD	45.80 %	36.60 %
Viral Illness	11.80	8.00
Depression	2.10	4.70
Anemia	3.30	2.80
Anxiety/Stress	4.50	2.80
Sinusitis	1.90	1.00
CHF	0.00	2.80
Medication Side Effect	0.40	2.10
Influenza	1.00	1.30
Diabetes Mellitus	0.10	1.60
Mononucleosis	1.60	0.04
COPD	0.02	1.10
Ischemic Heart Disease	0.02	1.10
GI Malignancy	0.08	1.00
Lymphoma/Leukemia	0.01	0.30
Other	27.40	32.80





LET'S DIVE RIGHT IN!

8 CASES. 4 GROUPS.

15MINS IN SMALL GROUPS.

10MINS TO PRESENT YOUR CASES.

Discuss a general approach to fatigue:

1. What questions in the medical interview are important?
2. What aspects of physical examination are important?
3. What diagnostic tests are useful?

CASE I

A 24 year old final year nursing student presents with a several month history of progressive fatigue.

1. What diagnoses would you consider?
2. What questions in medical interview do you wish to ask?
3. What physical examination do you wish to do?
4. What lab work would you order?

CASE 2

You are seeing a 29F who is 5 months postpartum, for low mood and decreased energy. She has limited interest in going out with her friends and finds it difficult to focus on her daily tasks. She has no suicidal ideation.

You note that she interacts well with her child and is asking appropriate questions regarding the child's growth and wellbeing. Her baby is sleeping well and in fact just started sleeping through the night without needing to breastfeed.

Her only medications are vitamin D 1000IU daily, levothyroxine 100mcg daily, and folic acid 0.4mg daily.

Her VS are: BP 132/96, HR 55, O2 98%, RR 18
Weight: 83kg (previous weight 6wk post-partum was 86kg)

CASE 3

1. What diagnoses are you considering in this patient?
2. What would you look for on physical exam?
3. Are there any investigations you would consider?
4. What treatment would you offer for your two leading diagnostic entities?

**CASE 3
CONT'D**

A 48 year old man presents to your clinic with excessive daytime somnolence. He is a construction worker and has been going to his car on break midday for a nap several times a week. He has been more irritable lately and finds it hard to look forward to his usual Friday night get-togethers with his friends. He has recently put on 30 pounds and his wife has moved into a different room in the last few months due to his snoring.

Before you enter the room you look at his vitals and his BP is 153/89, HR 75, O2 97%, T 36.5.

1. What diagnoses would you consider in this patient?
What is your leading diagnosis?
2. What investigations would you order for this patient?
3. What treatments would you suggest?
4. Are there any medico-legal ramifications in this case?

CASE 4

Fanny is a 48F you have been following lately for her profound fatigue. This began 7 months ago and has been progressive. Her bloodwork and urine tests, as well as a sleep study, have all been normal. You considered depression and did a trial of an SSRI to minimal effect. You have discussed sleep hygiene extensively with her but, even with 8 hours of sleep, she still finds she is tired in the mornings.

Today she reports that on the weekend she helped her husband rake the leaves and, since then, can barely get out of bed. She used to be very active and finds that this new fatigue, especially after exercise, is very frustrating. She has almost daily myalgias that have developed in the past few months.

She is requesting time off work because she knows there will be no way she can focus given her present state.

CASE 5

1. What diagnoses are you considering in this patient?
2. You consider chronic fatigue syndrome in this patient. How do you diagnose this condition and how does it differ from depression in its presentation?
3. What management plan would you implement for this patient?

**CASE 5
CONT'D**

Gail, a 51 year old female, presents to the office with insomnia. She has always found it hard to sleep but finds this is worsening of late, sometimes getting into bed at 9 and only falling asleep after midnight. She recently took on a managerial role at work and does find this stressful. She tells you, however, that she does have a nice pre-bedtime routine which involves a night-cap with her wife, and watching their show on Netflix. She feels she knows the details about setting up a good sleep environment and that those strategies haven't worked. She requests today that you prescribe her a sleeping pill.

1. Present your approach to a conversation about sleep hygiene with patients.
2. In this patient, what factors may be contributing?
3. You agree to work very hard on the sleep hygiene suggestions you provided. She returns in 6 weeks and, although things are improved, she still finds she is not getting restful sleep. What medications could you consider and what do you need to consider for each of them?

CASE 6

Your 84 year old patient, Mrs. Winter, is brought in by her daughter Julia. Mrs. Winter has a history of CAD, depression, chronic kidney disease, atrial fibrillation, anemia of chronic disease, GERD, and diabetes. Despite these conditions she is fairly stable and has been living on her own in a bungalow for many years. Julia states, however, that her mom is tired all the time and is no longer doing the activities she loves. She hasn't gone into her beloved garden in weeks and, when Julia comes to visit, she is often napping in her chair. She is 15 years a widow but has a good social group of friends, with whom she plays bridge. Her daughter brings you a whole bunch of pill bottles that were at her mom's bedside.

You take a look at his MAR (Medication Administration Record) to look for possible contributors. Her medication list is below. You note that there are three extra bottles that you have not prescribed.

CASE 7

amlodipine 5mg PO daily
metoprolol 25mg PO BID
apixaban 5mg PO BID
hydrochlorothiazide 25mg PO daily
citalopram 40mg PO daily
vitamin D 1000IU PO daily
vitamin B12 1000mcg PO daily
calcium carbonate 500mg PO daily
ferrous gluconate 300mg PO daily
pantoprazole 40mg PO daily
ASA 81mg PO daily
mirabegron 50mg PO daily
pregabalin 50mg PO QHS (started recently for restless leg syndrome)
trazodone 50mg PO which she takes at 8pm and then another at 10pm

Her extra bottles not on your medication list are:

clonazepam 0.5mg tablets (she reports these were her husbands but she was having trouble sleeping and found these very effective)
dimenhydrinate 25mg tablets (she finds her iron pills tend to make her nauseous so occasionally she takes one or two of these)
melatonin 10mg tablets

MAR

**CASE 7
CONT'D**

1. Looking at her medication list, what are some of the medications or interactions that could be contributing to her symptoms?
2. What is your step-wise plan for this patient?

**CASE 7
CONT'D**

Your patient Mr. Pilon, a 56M, is rarely seen in clinic as he is the CEO of a multinational company. He comes in with fatigue, poor concentration at work, and lack of motivation. He feels he is losing vision for his company and no longer has any interest in Friday after work drinks with his college friends.

He and his wife separated 6 months ago, with whom he has three kids, aged 14, 17, and 19. His father passed away in May 2020 and his family was unable to host a funeral for him. His mom lives still in Calgary with his younger sister.

He has always been a 1-2 scotch a night person, but lately he has increased this to about 2-4oz nightly due to poor sleep. He has also begun vaping about a gram of THC after work to relax. With the closures of the gyms he has not been exercising as he used to love doing. He occasionally goes for a 30m walk on the weekends to decompress.

He comes in hoping for something to help him sleep and also because a colleague at work suggested he might be depressed.

PHQ-9 is 17

GAD-7 is 6

CASE 8

1. What diagnoses are likely here? What would be in your differential diagnosis?
2. What social factors are contributing to his symptoms?
3. What questions would you be sure to ask on history?
4. What are this gentleman's risk factors for suicide?
5. What would you include in your management plan for this patient?

**CASE 8
CONT'D**

REFERENCES

O'Mahony, D., et al. Age Ageing. 2015 Mar; 44(2): 213–218.

RxFiles Geriatric