



**McGill**

ANNUAL REFRESHER COURSE  
FOR FAMILY PHYSICIANS

**2022**

# **Common GIM Consultations That Could Be Avoided**

**Plenary – 2**

**13:00**

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West Island Cardiovascular Clinic  
Retired Assistant-Professor of  
Medicine, McGill University**

## **Potential Conflict of Interest:**

**None for this talk**

# Objectives

- **Understand the role of a specialist in Internal Medicine.**
- **Review possible investigations in a Primary Care setting.**
- **Guide patients to the most appropriate consultant.**

## **What is an Internal Medicine consultation?**

**Internal medicine is the study, diagnosis, and treatment of conditions that affect the internal organs — conditions such as heart disease, hypertension, diabetes, obesity, and lung disease. Internal medicine specialists often care for people with complex, chronic, and multisystem disorders.**

**“To find out what one is fitted to do,  
and to secure an opportunity to do it, is  
the key to happiness.”**

**John Dewey**

# Pain

There are five common types of pain, but some pain can fit into more than one category, which is where the complication comes in.

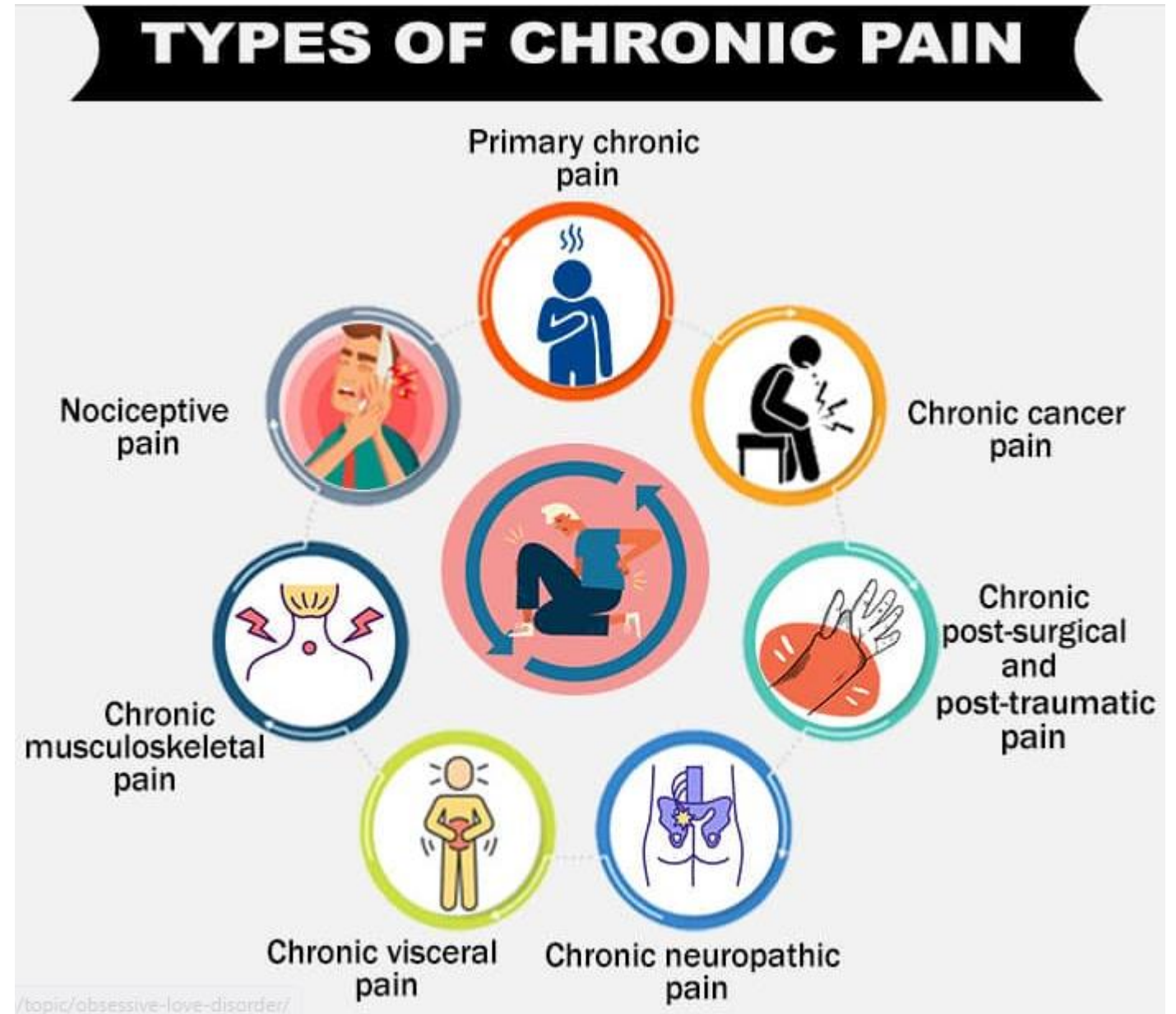
→The five most common types of pain are:

- Acute pain: frequently caused by damage to tissue such as bone, muscle, or organs, and the onset is often accompanied by anxiety or emotional distress.
- Chronic pain: can be the sequel of an acute pain. Often poor response to meds and associated to anxiety, depression, fatigue, insomnia.
- Neuropathic pain: caused by damage or injury to the nerves
- Nociceptive pain: caused by damage to body tissue (caused by an external injury)
- Radicular pain: pain that radiates from your back (follows  $\geq 1$  dermatoma)

# Pain

Chronic pain can be defined as recurrent pain lasting more than 3-6 months.

Better served by a Pain Clinic  
(multidisciplinary team)



# Fibromyalgia

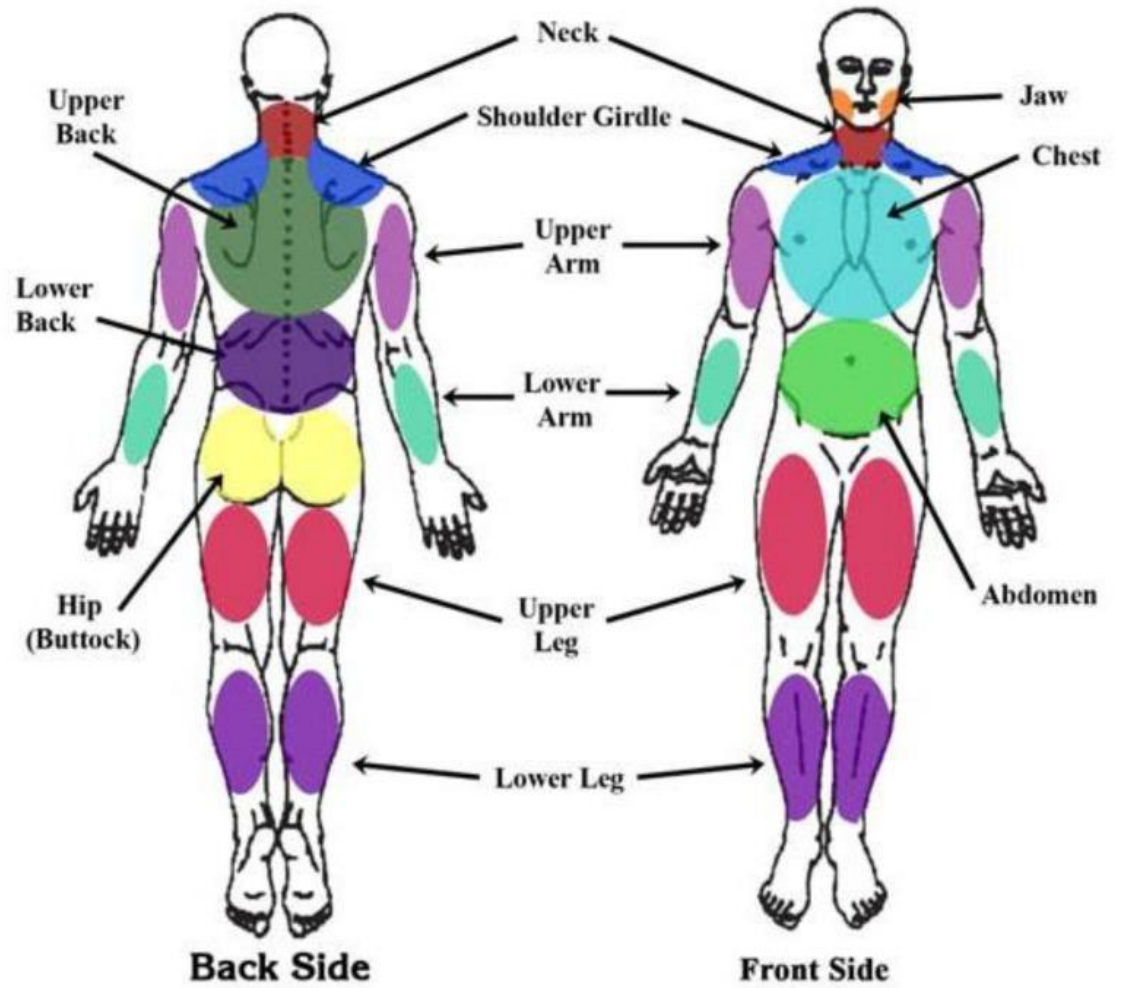
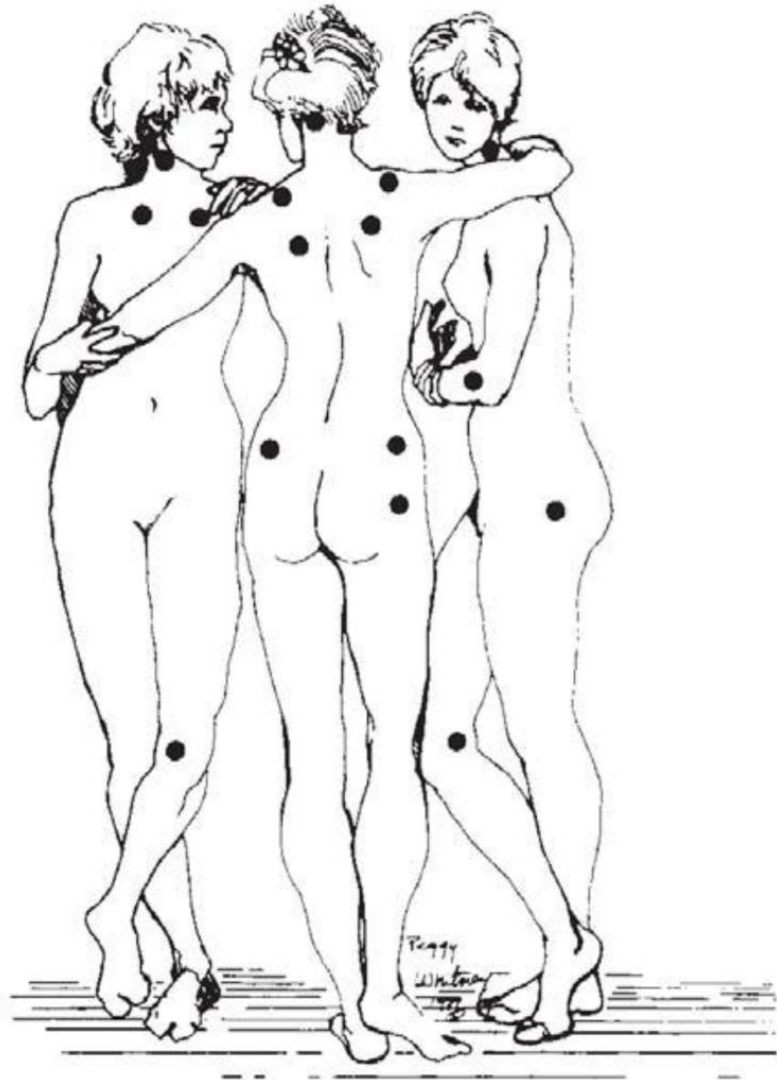


Image based on the original "The Three Graces" by the French painter Jean-Baptiste Regnault (1793).

Presence of generalized pain, defined as pain in at least four of five regions (four quadrants and axial)

# Fibromyalgia

- Often associated with fatigue, depression (traits), insomnia.
- No change in general health state.
- No precipitant.
- Normal usual laboratory investigation
- Rheumatological markers negative.
- X-rays negative.

→ Called also chronic fatigue syndrome

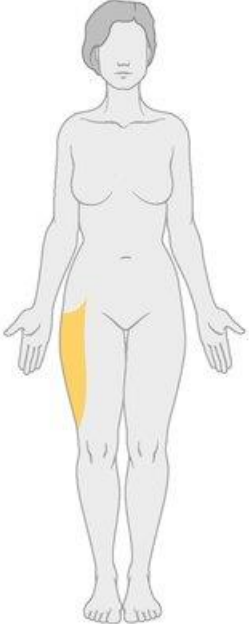
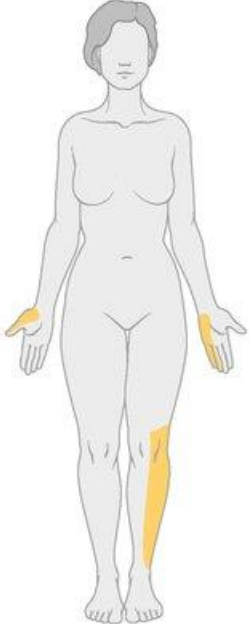
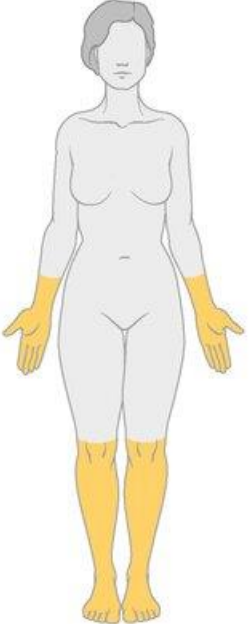
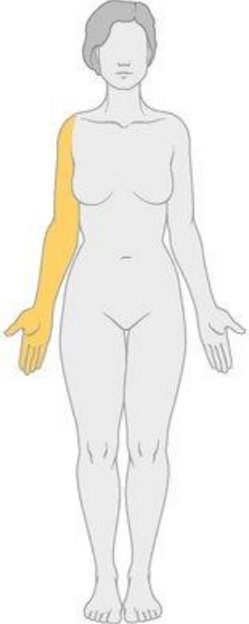
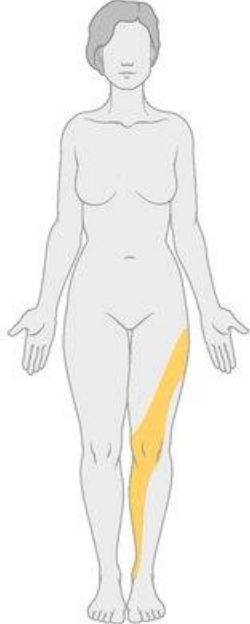
Better served by a rheumatologist who has interest in this condition.

Also, should be followed by a team of health care specialists: psychologist, massage therapy, kinesiologist, sleep lab.



# Better referral: acute/sub-acute onset of neurological pain

Usually related to diabetes, B12 deficiency, tumors (including malignancy), hematology malignancies, HIV, syphilis, Lyme disease, advanced CKD, alcohol, spinal hernia or localized trauma

Mononeuropathy	Mononeuritis multiplex	Polyneuropathy	Plexopathy	Radiculopathy
				
Damage to a single peripheral nerve	Damage to $\geq 2$ peripheral nerves Results in asymmetrical distribution	Damage to terminal branches of multiple nerves Results in symmetrical, distal distribution	Damage to a nerve plexus, e.g., brachial plexus	Damage to nerve root Distribution follows corresponding dermatome

# Headaches

DIFFERENTIAL DIAGNOSIS OF HEADACHE			
Clinical features	Cervicogenic headache	Migraine	Tension-type headache
Female:Male	50:50	75:25	60:40
Lateralization	Unilateral without sideshift	60% unilateral with sideshift	Diffuse bilateral
Location	Occipital to frontoparietal and orbital	Frontal, periorbital, temporal	Diffuse
Frequency	Chronic, episodic	1-4 per month	1-30 per month
Severity	Moderate-severe	Moderate/Severe	Mild/moderate
Duration	1 hour to weeks	4-72 h	Days to weeks
Pain character	Non-throbbing, and non-lancinating, pain usually starts in the neck	Throbbing, pulsating	Dull
Triggers	Neck movement, and postures, limited ROM, pressure over C0-C3	Multiple, neck movement not typical	Multiple, neck movement not typical
Associated Symptoms	Usually absent or similar to migraine but milder, decreased ROM	Nausea, vomiting, visual changes, phonophobia, photophobia	Occasionally decreased appetite, phonophobia or photophobia

International Classification of Headache Disorders from the International Headache Society

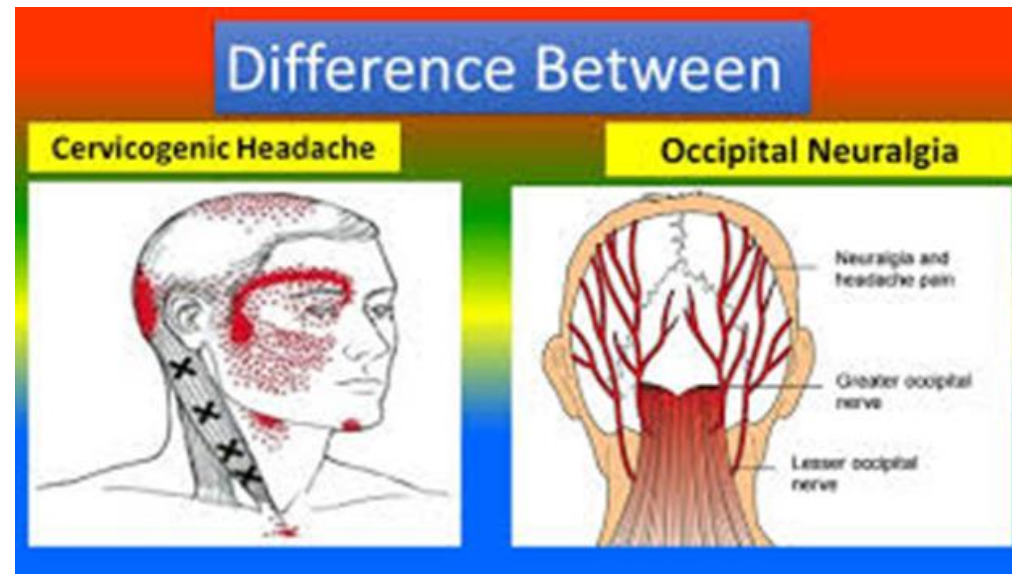
# Cervicogenic headaches

- Cause: osteoarthritis that impacts the vertebrae at the top of your spine
- Unilateral pain that starts in the neck and is referred from bony structures or soft tissues of the neck. Usually starts after neck movement. It usually accompanies a reduced range of motion (ROM) of the neck.
- Referred pain arising from irritation caused by cervical structures innervated by spinal nerves C1, C2, and C3. → Any structure innervated by the C1–C3 spinal nerves could be the source of a cervicogenic headache.

→ C-spine X-ray

Tx: heat, analgesia, acupuncture,  
physiotherapy

BEST: cortisone injection

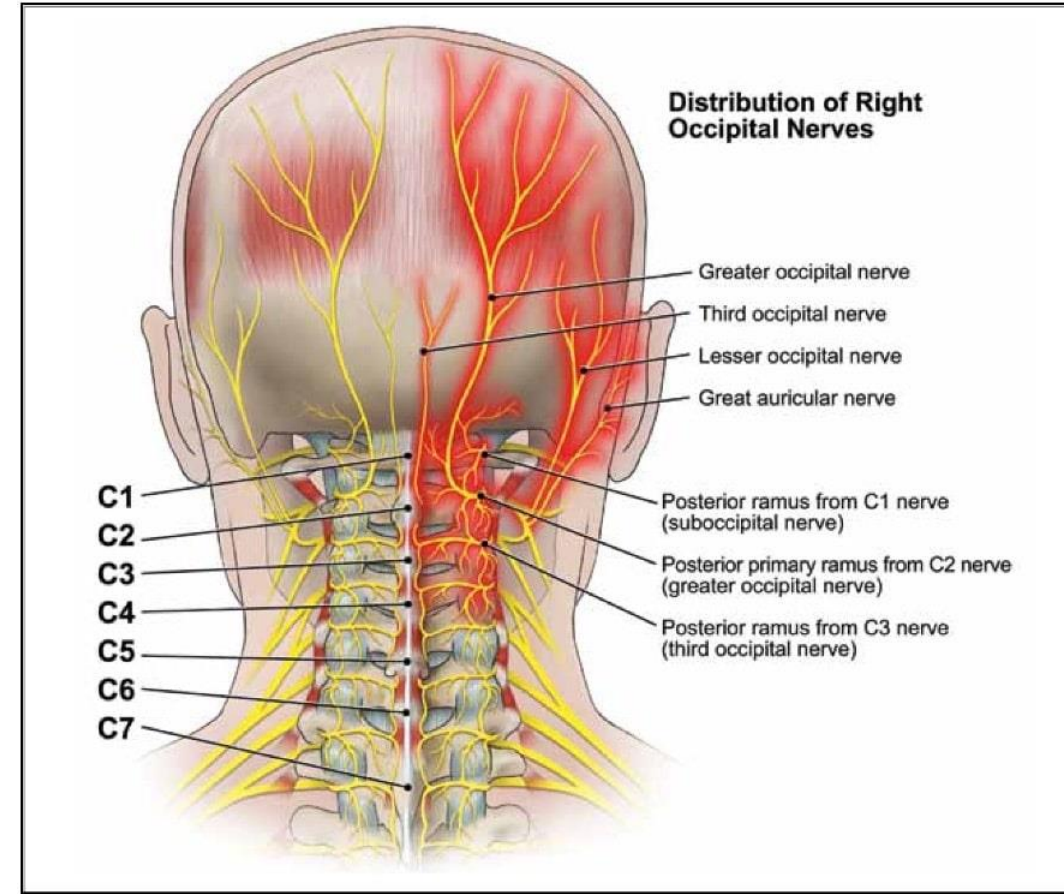


# Occipital Neuralgia

- Neuritis of C2 root.
- Distinct type of headache characterized by piercing, throbbing, or electric-shock-like chronic pain in the upper neck, back of the head, and behind the ears;  
→ usually on one side of the head.
- Reproduced by local palpitation just under the occipital bone

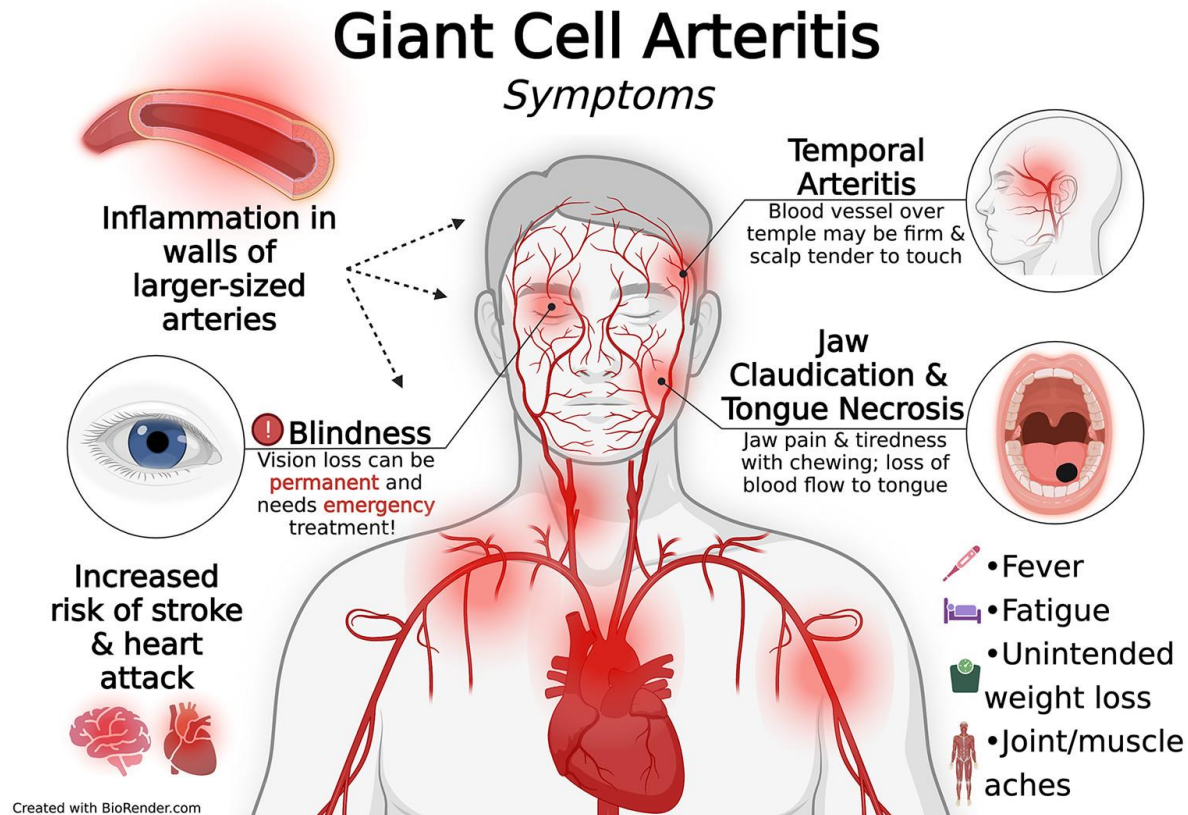
Tx: heat, analgesia, physiotherapy,  
acupuncture

BEST: Cortisone injection



# Temporal arteritis

- Temporal or giant cell arteritis is an inflammation of medium and small extracranial vessels that may result in ocular ischemia
- Often unilateral symptoms, signs. At times, only muscular fatigue, arthralgias.





# Fatigue

- The term “fatigue” can be used to describe difficulty or inability to initiate activity (subjective sense of weakness); reduced capacity to maintain activity (easy fatigability); or difficulty with concentration, memory, and emotional stability (mental fatigue).
- When some patients use the word “fatigue,” careful history taking reveals that they are referring to sleepiness or an uncontrollable need to sleep.
- Can be lack of energy
- The differential diagnosis of fatigue includes lifestyle issues, physical conditions (deconditioning), mental disorders, and treatment side effects.
- The history and physical examination should focus on identifying common secondary causes (e.g., medications, anemia, pregnancy) and rarely life-threatening problems, such as cancer.
- Results of laboratory studies affect management in **only 5 percent** of patients (e.g. anemia, renal failure, hyponatremia, hepatic failure, retention of CO<sub>2</sub>, heart failure, OSA, sedentary).

# Tips for Treating Fatigue



Get enough sleep



Practice relaxation activities



Stay hydrated



Eat healthy foods



Exercise regularly



Avoid known stressors



Don't overbook yourself professionally and socially

# Fatigue

- Treatment of all types of fatigue should include a structured plan for regular physical activity that consists of stretching and aerobic exercise, such as walking.
- Caffeine and modafinil may be useful for episodic situations requiring alertness. Short naps are proven performance enhancers. Selective serotonin reuptake inhibitors, such as fluoxetine, paroxetine, or sertraline, may improve energy in patients with depression.
- Patients with chronic fatigue may respond to cognitive behavior therapy. Scheduling regular follow-up visits, rather than sporadic urgent appointments, is recommended for effective long-term management.



# Psychosomatic conditions

- Body is affected by the psychological tensions that either causes disease or worsen the pre-existing disease in a person.
- Symptoms: headaches, dizziness, memory loss, stomach pain, fatigue, dyspnea. Psychosomatic conditions are defined by the fact that they can't be traced back to a medical problem like an injury, a disease, or a tumor. Can affect any part of the body.
- Important point: the symptoms are real.
- People with psychosomatic disorder usually don't report overt symptoms of psychiatric distress. Instead, they believe their problems are caused by medical conditions. They tend to visit healthcare providers frequently to get tests and treatments, often not receiving a diagnosis, which may lead to frustration and distress.
- Somatic symptom disorder is common, occurring in about 5% to 7% of the general population. For reasons that are not understood, women have somatic pain about 10 times more often than men.

# Psychosomatic conditions



- How is psychosomatic disorder diagnosed?
  - History of (multiple) visits to healthcare providers.
  - Physical exam.
  - Series of negative results on tests.
- To be diagnosed with somatic symptom disorder, a person must have:
  - One or more symptoms that are distressing or disruptive to daily life.
  - A history of those symptoms for at least six months.
  - Persistent thoughts, worries or anxiety about the symptoms.
- Several treatments can help people with somatic pain symptoms, including:
  - Cognitive behavioral therapy.
  - Medications, such as antidepressants.
  - Mindfulness-based therapy.
  - Referral to a specialist in mental health (for example, a psychiatrist or psychologist).
  - Regular contact with your primary care provider.

# Palpitations

- Can feel like the heart is: beating too fast, flip-flopping, fluttering rapidly pounding, skipping beats
- Common causes:
  - Strong emotional responses, such as stress, anxiety or panic attacks
  - Depression
  - Strenuous exercise
  - Stimulants, including caffeine, nicotine, cocaine, amphetamines, and cold and cough medications that contain pseudoephedrine
  - Fever
  - Hormone changes associated with menstruation, pregnancy or menopause
  - Too much or too little thyroid hormone
  - Age
- **Red flags**: Chest discomfort or pain, fainting, severe shortness of breath, severe dizziness

# Palpitations

Work-up: resting ECG, Holter monitoring (72 hours), echocardiogram (intelligent watch?)

→ Sustained palpitations and significant symptoms require early referral for evaluation.

→ Patients presenting with syncope or ongoing chest pain to go to ER

**Please note**: There is always a great discrepancy between subjective symptoms and actual results of investigation. → Hypochondria

→ Anxiety

→ Somatization

**Treatment**: re-assurance,  $\beta$ -blocker PRN if quite/symptomatic if benign E-S. If documented arrhythmia, to refer in Cardiology.

# Abdominal pain

Ways to describe pain in your abdomen include:

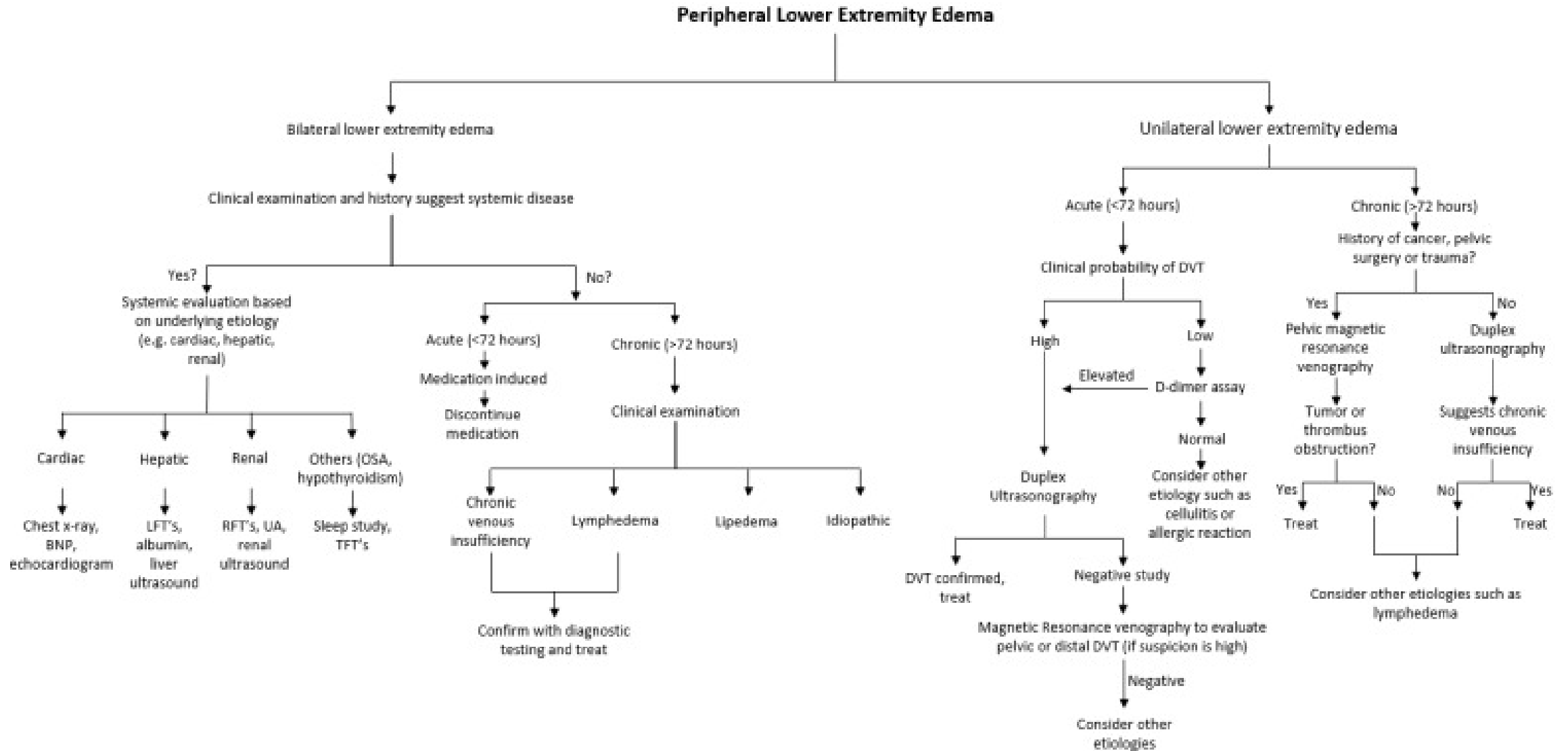
- Generalized pain -- This type of pain is more typical for a stomach virus, indigestion, or gas. If the pain becomes more severe with distention, it may be caused by an occlusion of the intestines.
- Localized pain -- May span from an organ, such as the appendix, gallbladder, or stomach.
- Cramp-like pain -- Not serious most of the time. It is likely to be due to gas and bloating, and is often followed by diarrhea. Colicky pain -- This type of pain comes in waves. It very often starts and ends suddenly, and is often severe. Kidney stones and gallstones are common causes of this type of pain.

Red flags: nausea, vomiting, melena, bright red blood per rectum, fever,  
acute pain lasting over 24 hours

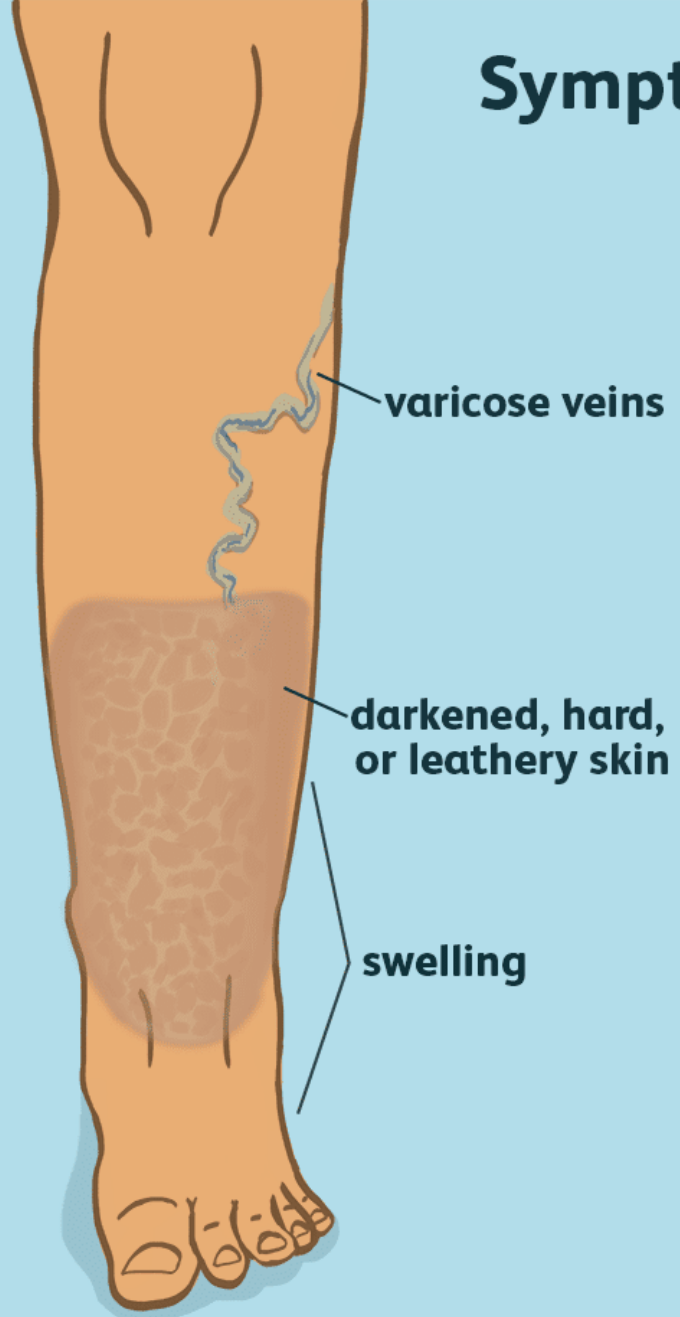
# Irritable bowel syndrome

- Irritable bowel syndrome (IBS) is a common condition that affects the digestive system. It causes symptoms like stomach cramps, bloating, diarrhea and constipation. Often, anxiety, hypochondria, but no change in general health.
- Differential diagnosis:
  - malabsorption: cystic fibrosis (the number one cause in the United States), chronic pancreatitis, lactose intolerance, celiac disease, Whipple disease.
  - medications: NSAID, metformin, PPI's, antacids, antidepressants, chemotherapy, antibiotics.
- Red flags: weight lost, bloody diarrhea, mass on palpation, distention, dyspnea, palpitations, pale skin.
- Limited investigation: CT scan (?), CBC, electrolytes, albumin, liver function tests, FIT, the IgA-human tissue transglutaminase (TTG) or IgA-endomysial antibody (EMA) test, fecal leucocyte test (FLT)
- Consultation with Nutritionist. Symptomatic treatment.

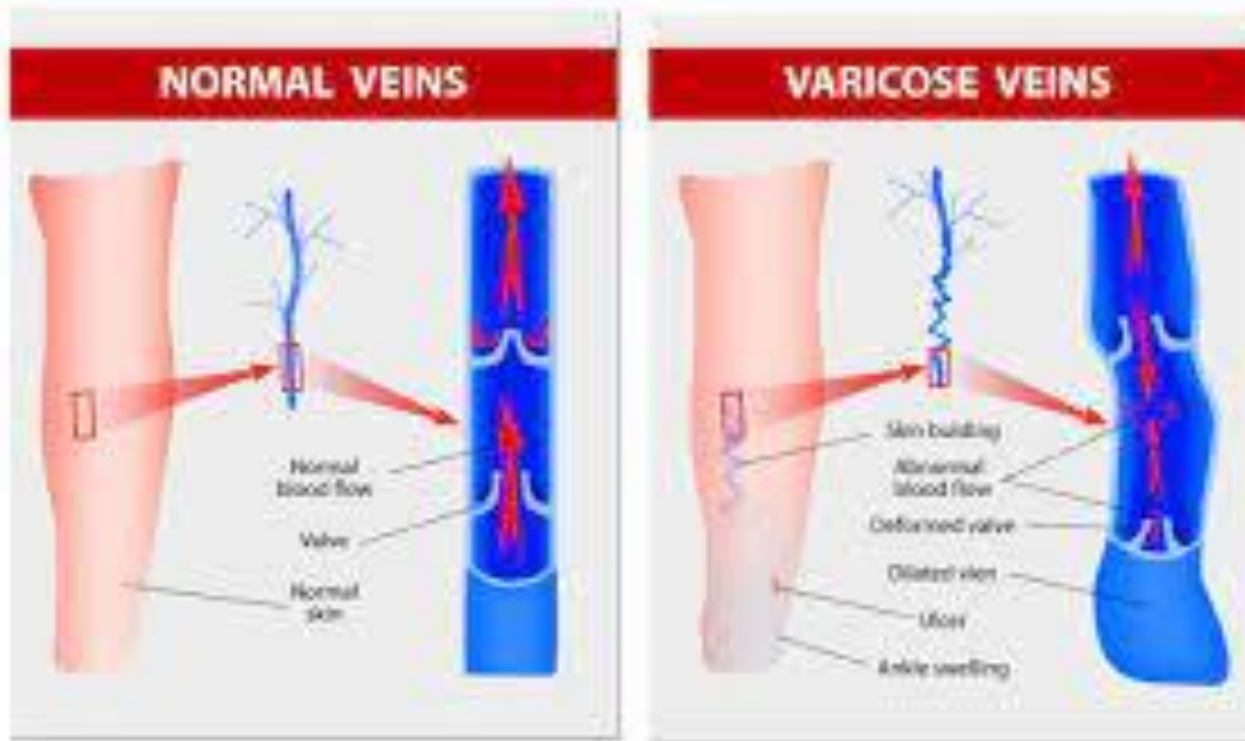
# Leg oedema



# Symptoms of Venous Insufficiency







## Causes:

- Overweight
- Pregnancy
- Family history
- Post-trauma (post DVT)
- Lack of exercise
- Sitting or standing for long periods of time

VARICOSE VEINS	CHRONIC VENOUS INSUFFICIENCY		
Bulging Veins	Leg Swelling	Skin Color and Texture Changes	Venous Ulcers
			

Photos by Rajabrata Sarkar, MD, PhD

## Treatment:

- Sodium/fluid restriction
- Leg elevation
- Physical activity
- Compression stockings
- Diuretic PRN

# Summary

- **GIM specialists don't treat chronic pain syndromes when work-up is negative and for which an organic cause is doubtful**
- **Headaches can be of a mixed origin, but a cervical spine component is quite possible**
- **Psychosomatic features are common in chronicity and when complaints are not matched with organ damage**
- **Venous insufficiency is the most common cause of leg edema and can be prevented or improved with postural therapies, physical activity and dietary changes.**

**Thank you**

