



SNS COLLEGE OF ALLIED HEALTH SCIENCES
SNS Kalvi Nagar, Coimbatore - 35
Affiliated to Dr MGR Medical University, Chennai



DEPARTMENT: ALLIED HEALTH SCIENCES
COURSE NAME: Pathology

Topic: Raynauds phenomenon



CASE SCENARIO



- A 42 year old male presented with a complaints of discolouration of extremities associated with numbness. How will you manage this patient?



Introduction



- **Definition**

Raynaud's phenomenon is a problem that causes decreased blood flow to the fingers. In some cases, it also causes less blood flow to the ears, toes, nipples, knees, or nose. This happens due to spasms of blood vessels in those areas. The spasms happen in response to cold, stress, or emotional upset.

Causes

The exact cause of Raynaud's is unknown. It is possible that some blood disorders may cause Raynaud's by increasing the blood thickness. This may happen due to excess platelets or red blood cells. Or special receptors in the blood that control the narrowing of the blood vessels may be more sensitive.





Types of Raynauds phenomenon



- There are two main types of the condition.
- **Primary Raynaud's.** Also called Raynaud's disease, this most common form isn't the result of another medical condition. It can be so mild that many people with primary Raynaud's don't seek treatment.
- **Secondary Raynaud's.** Also called Raynaud's phenomenon, this form develops because of another health condition. Although secondary Raynaud's is less common than the primary form, it tends to be more serious.
- Symptoms of secondary Raynaud's usually appear around age 40. That's later than symptoms appear for primary Raynaud's.

Causes of secondary Raynaud's include:

- Connective tissue diseases.
- Diseases of the arteries
- Carpal tunnel syndrome
- Repeated actions or vibration
- Smoking



Risk factors



Risk factors for primary Raynaud's include:

- **Sex-** The condition affects more women than men.
- **Age-** between the ages of 15 and 30.
- **Climate-** colder climates.
- **Family history.** Having a parent, sibling or child with the disease appears to increase the risk of primary Raynaud's.

Risk factors for secondary Raynaud's include:

- **Certain diseases.** These include conditions such as scleroderma and lupus.
- **Certain jobs.** These include jobs that cause repeated trauma, such as using tools that vibrate.
- **Certain substances.** This includes smoking, taking medicines that affect the blood vessels and being around certain chemicals, such as vinyl chloride.



Symptoms



- Fingers that turn pale or white then blue when exposed to cold, or during stress or emotional upset, then red when the hands are warmed
- Hands that may become swollen and painful when warmed
- Sores on the finger pads develop, in severe cases
- Gangrene in the fingers that causes infection or needs amputation, this is rare



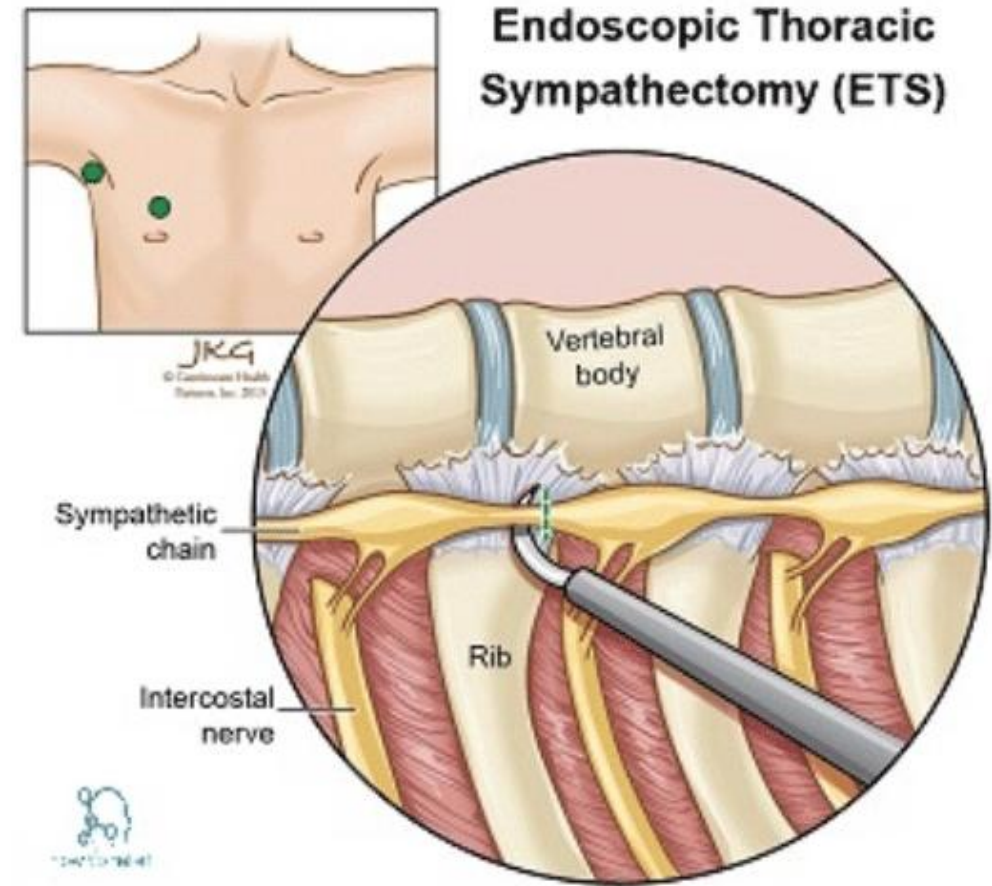
- Medical history collection
- Physical examination
- Cold challenge test

Diagnosis



Management

- Avoiding exposure to cold
- Keeping warm with gloves, socks, scarf, and a hat
- Stopping smoking
- Wearing finger guards over fingers with sores
- Avoiding trauma or vibrations to the hand (such as with vibrating tools)
- **Medications-** Antihypertensive drugs & calcium channel blockers
- **Surgical- Sympathectomy-** under general anesthesia- cutting & sealing the nerve





Reference



- The Text Book of Pathology author Nithin chawla
- For further reference –
- https://youtu.be/ljVuxaktH_Y?si=j1YR3tjPI9-H5D9E