

RAYNAUD'S DISEASE

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WHAT IS RAYNAUD'S DISEASE ???

- Raynaud's is a rare disorder that affects the arteries.
- Raynaud's is also called a disease, syndrome, or phenomenon.
- Vasospasm, which is a narrowing of the blood vessels.
- Vasospasm of the arteries reduces blood flow to the fingers and toes.
- Also may occur at the tip of ears and nose.

Definition of Raynaud's Disease

- Raynaud's disease refers to a disorder in which the fingers or toes suddenly experience decreased blood circulation.
- It is characterized by repeated episodes of color changes of the skin of digits on **cold exposure or emotional stress.**

RAYNAUD'S DISEASE



Constriction of vessels decreases blood supply to fingers, causing them to turn pale.



Cut-away view of vessel



CLASSIFICATION

- ❖ Primary Raynaud's / Raynaud's disease the causes is not known.(idiopathic).
- ❖ Secondary Raynaud's / Raynaud's phenomenon where the causes are known.



Constriction of vessels decreases blood supply to fingers, causing them to turn pale.



Cut-away view of vessel

ETIOLOGY PRIMARY RAYNOLDS

- Cold temperature
- Stress
- Blood vessels in spasm
- Repetitive actions
- hand and foot injuries
- Exposure to certain chemicals
- Medicines
- Smoking



ETIOLOGY SECONDARY RAYNOLDS

- ❖ Scleroderma
- ❖ Lupus.
- ❖ Rheumatoid arthritis
- ❖ Sjogren's syndrome
- ❖ Diseases of the arteries.
- ❖ Carpal tunnel syndrome



RISK FACTORS

PRIMARY RAYNAUD'

Gender

Age

Family history

Living area climate



SECONDARY RAYNAUDS'S

- ❖ Age
- ❖ Work place
- ❖ Injury of hand and leg
- ❖ Repetitive action
- ❖ Living climate
- ❖ Smoking
- ❖ Medicines



PATHOPHYSIOLOGY

Expose to cold /
triggering factor

Small arteries at
fingers and toes
vasospasm

Become
pale, less blood
flow and low O₂
supply

Warm up
(arteries dilate)

Blood flow
increase, high O₂
supply

Color change to
bright red

Raynaud's Disease

Affected area is
warm and
throbbing pain

CLINICAL MANIFESTATION

During the Raynaud's attack, arteries become narrow and no blood supply to the area, this will cause :

- Turn pale or white and then blue
- Feel numb, cold, or painful
- Turn red, throb, tingle, burn, or feel numb as blood flows back to the affected area

INVESTIGATION

- ❖ Cold Stimulation Test
- ❖ Nailfold Capillaroscopy
- ❖ Antinuclear antibody (ANA)
- ❖ Erythrocyte sedimentation rate (ESR or "sed rate")
- ❖ C-reactive protein (CRP) tests

TREATMENT

❖ Medical treatment

- Calcium channel blockers – Norvasc
- Alpha blockers – Prazosin
- Vasodilators -- Losartan (Cozaar)



Raynaud's Disease



❖ Surgical treatment

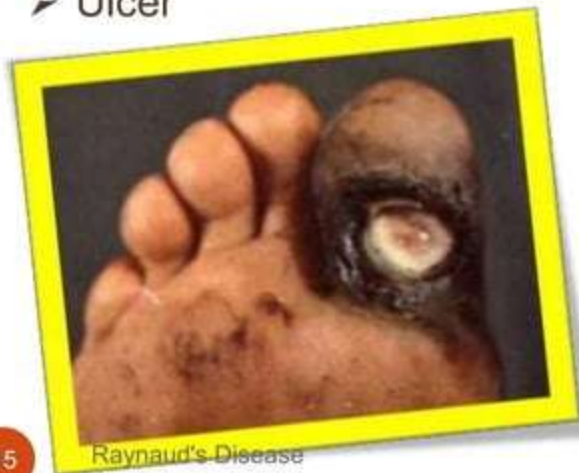
- Nerve surgery--- sympathectomy
- Chemical injection
- Amputation.



COMPLICATION

Complete lost of blood to the digits will cause:

- Deformities of fingers and toes
- Gangrene
- Ulcer



Raynaud's Disease



Nursing treatment

- Give warm cloths to the patient
- Apply hot application
- Give comfortable position
- Lifestyle to minimize treatment

HEALTH EDUCATION

- Stop smoking
- Exercise
- Control stress
- Avoid caffeine
- Take care of feet and hand
- Dress warmly outdoors



Nursing Diagnosis

- Infective peripheral tissue perfusion related to lack of blood supply to extremities.
- Anxiety related to disease condition.
- Pain at infection site related to disease condition.
- Insomnia related to the hospitalization as evidenced by verbalization.
- Deficient knowledge regarding self care activities as evidenced by verbalization.

Nursing Intervention-1

- Assess the patient for the blood circulation , colour and sensation at the extremities.
- Apply warm compress at the affected area
- Administer the medication as prescribed try doctor such as vasodilator, calcium channel blockers and alpha blockers.
- Monitor the blood circulation to the extremities every two hourly.
- Encourage patient to perform extremities exercises while sitting or during work.

Nursing Intervention-2

- Assess the patient's anxiety level by observing clients behavior E.g. crying facial expression and anxious.
- Reinforce doctors explanations to patient by using the non medical term.
- Provide moral and emotional support to patient.
- Encourage divisional therapy E.g. watching T.V, Listening songs.

Nursing Intervention-3

- Assess the general condition of the client.
- Give comfortable position to the client.
- Give medications to the client as prescribed by doctor.
- Provide dimensional therapy eg. Watching TV , listening songs.

Nursing Intervention-4

- Dim the lights for good sleep of the patient.
- Avoid the disturbance to the patient.
- Give comfortable position to the patient.



Nursing Intervention-5

- Assess client knowledge level.
- Encourage patient to perform extremities exercise.
- Advise patient to place the fingers or toe under the warm water during the attack.
- Advise patient to stop smoking.
- Advise patient not to wear tight wrist band or watch and clothing.

CONCLUSION

- ❖ Raynaud's sometimes is called a disease, syndrome, or phenomenon.
- ❖ Its a narrowing of the blood vessels
- ❖ Vasospasm of the arteries reduces blood flow to the fingers and toes.
- ❖ In people who have Raynaud's, the disorder usually affects the fingers.
- ❖ In about 40 percent of people who have Raynaud's, it affects the toes. Rarely, the disorder affects the nose, ears, nipples, and lips.

- ❖ Has two type of raynaud that is primary and secondary Raynaud disease.
- ❖ In both types of Raynaud's, even mild or brief changes in temperature can cause Raynaud's attacks.
- ❖ People with severe Raynaud's can develop skin sores or gangrene from prolonged or repeated Raynaud's attacks.
- ❖ It can be treated e.g. by placing the hand under warm water to vasodilate

Bibliography

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