



# SNS COLLEGE OF NURSING

## Saravanampatti (po), Coimbatore.

DEPARTMENT OF NURSING  
COURSE NAME : BSC (NURSING) II YEAR  
SUBJECT : MEDICAL SURGICAL NURSING  
UNIT:IX: DISORDERS OF INTEGUMENTARY  
SYSTEM  
TOPIC :PSORIASIS



# INTRODUCTION



It is one of the most common skin disease. It is thought that this chronic disease stems from a hereditary effect that causes over production of keratin.

# DEFINITION

It is a chronic, non-infectious inflammation involving keratin synthesis that results in psoriatic patches.





# INCIDENCE



It is an inflammatory skin disease in which the skin cell replicate at an extremely rapid rate. New cells are produced faster than normal but the rate at which old cells sloughed off is unchanged, this cause the cell build up on skin surface, forming thick patches or plaque of red sores, covered with flaky, silvery white dead skin cells(scale).



# INCIDENCE



- It affects approximately 2 % of the population.
- It occurs in any age,  
most commonly occurs in people between 15-35 years of age



# ETIOLOGY



Unknown

Genetic

Some aggravating factors:

Stress,

Smoking, alcohol

Trauma,

Obesity

Hormonal changes, climate

Auto immune disease

Medications – lithium salt, beta blockers

# TYPES OF PSORIASIS

## PLAGUE PSORIASIS

It is also known as psoriasis vulgaris.

It appear as raised, inflamed red skin, covered by silvery patches or scales.

Sites are: elbow, knee, sacrum, scalp, hands , feet's & lower back.



# TYPES OF PSORIASIS

## Guttate psoriasis

Eruption of small papule over the upper trunk and proximal extrimities.





# TYPES OF PSORIASIS

## Inverse Psoriasis

It is found in skin folds such as inguinal, axilla and sweating areas. Scaling is minimal or absent and lesions appears glossy, smooth and bright red.



# TYPES OF PSORIASIS

## Pustular Psoriasis

It is an pus filled lesion surrounded by a red skin. It appears at hands and feet.



# TYPES OF PSORIASIS

## Erythrodermic Psoriasis:

It is a superficial scaling/peeling that may appear like burning. It affects all the body sites.

Causes is sun burn, allergic reaction and strong coal product use.



## Nail Psoriasis:

It appear as a small nail, yellow brown nail with chalk like debris build up under nails.



# TYPES OF PSORIASIS

- Psoriatic Arthritis:
- This condition involve both psoriasis and joint inflammation.



# PATHOPHYSIOLOGY

Due to etiological factors

↓  
Hyperactivity of T-cells

↓  
Epidermis infiltration & keratinocyte proliferation

↓  
Deregulated inflammatory response

↓  
Large production of various cytokines

↓  
Superficial blood vessels dilated & vascular engorgement

↓  
Epidermal hyperplasia & improper cell maturation

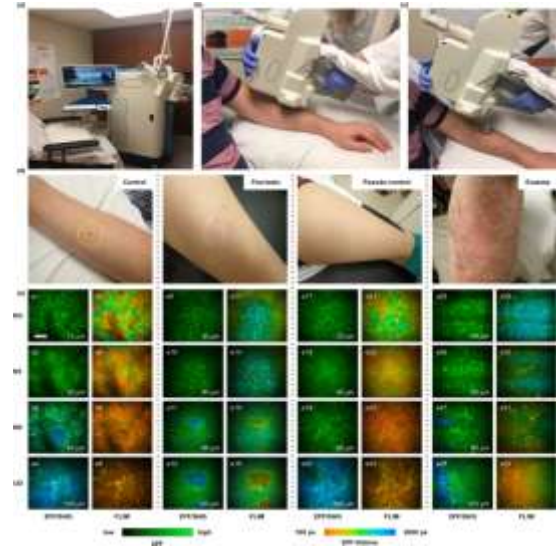
↓  
Fails to release adequate lipid which leads to flaking, scaling

↓  
presentation of psoriasis lesion

↓  
Silvery scale of the skin

- The first sign is 'red spot' on body.
- Patches of the skin is dry, swollen and inflamed covered with silvery flakes.
- Raised and thick skin
- Pain, itching, burning
- Yellow discolouration, pitting and thickening of nails are noted if they are affected.
- Cracked and bleeding points, if the scales are scrapped away.
- Koebner phenomenon: it is develop at the site of injury such as scratch or sunburn.

- History collection
- Physical examination
- Skin biopsy
- Blood and radiography to rule out psoriatic arthritis.





# MEDICAL MANAGEMENT

1. Topical treatment- it slow overactive epidermis
  - I. Topical corticosteroids- they slow the turnover by suppressing the immune system which reduce inflammation & relieve itching.
  - II. Topical steroids

III. Vitamin D analogues – e.g. – calcipotriene, it suppress epidermopoiesis (development of epidermal cells) causing sloughing of growing epidermal cells.

IV. Coal tar- dry distillation product of organic matter heated in the absence of oxygen, combination of creams, ointments and pastes.

V. Tazarotene – it reduce mainly scaling & plaque , thickness, normalize the DNA activity.

VI. Topical calcineurin Inhibitors – tacrolimus, they inhibit activation of the cells which reduce inflammation and plaque build up.

VII. Emollients – to avoid dryness. It reduce scaling and limit pain.

## 2. Phototherapy

- I. Sunlight – activated T- cells in skin are destroyed lead to reduce scaling and inflammation.
- II. UV broadband phototherapy – artificial light

III. Photo chemotherapy Plus UVA – light sensitizing medication taken before exposure to UV light.

IV. Eximer laser – control beam of UVB light directed to psoriatic plaque to control scaling.

V. Pulse dye laser – it destroy the tiny blood vessels that contribute psoriasis.

3. Systemic therapy – e.g – cyclosporine, methotrexate, acitretin.

- Impaired skin integrity related to lesion & inflammatory response as evidence by itching all over the body.
- To advice the patient not to scratch the affected areas.
- Too frequent washing produce more soreness & scaling water should be warm, not hot and the skin should be dry by patting a towel rather than rubbing.
- Apply a thin film of emollients after washing the area.
- Provide a calorie and high protein diet.



# NURSING DIAGNOSIS



- Risk of infection related to hyponatremia as evidence by loss of protein and fluid from lesion.
- Monitor vital sign.
- Examine for sign of infection.
- Keep the lesion clean.
- Motivate the patient to improve the nutrition.
- To provide the antibiotics.



# NURSING DIAGNOSIS



- Acute pain related to inflammation as evidence by patient verbalization
- Provide the emollients after washing the area it will relieve the soreness.
- To provide the comfort measures.
- To provide the pain medication which relieves pain.

# ASSESSMENT

- Define Psoriasis
- Enumerate the Types of Psoriasis
- List The clinical manifestations
- What Are The Drugs Used For Psoriasis
- Describe the nursing management





# References



- BRUNNER & SUDDARTH, MEDICAL SURGICAL NURSING, 1<sup>ST</sup> EDITION
- LEWIS'S, MEDICAL SURGICAL NURSING, 9<sup>TH</sup> EDITION
- M.P SHARMA, MEDICAL SURGICAL NURSING, 1<sup>ST</sup> EDITION, AITBS PUBLISHERS

