

# CLINICAL PRACTICE GUIDELINES

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## MANAGEMENT OF PSORIASIS VULGARIS



Ministry of Health Malaysia



Dermatological Society of Malaysia



Academy of Medicine Malaysia

# TOPICAL THERAPY

Clinical Practice Guidelines  
Management of Psoriasis  
Development Group

Dr. Wong Su- Ming  
Dermatologist  
UM

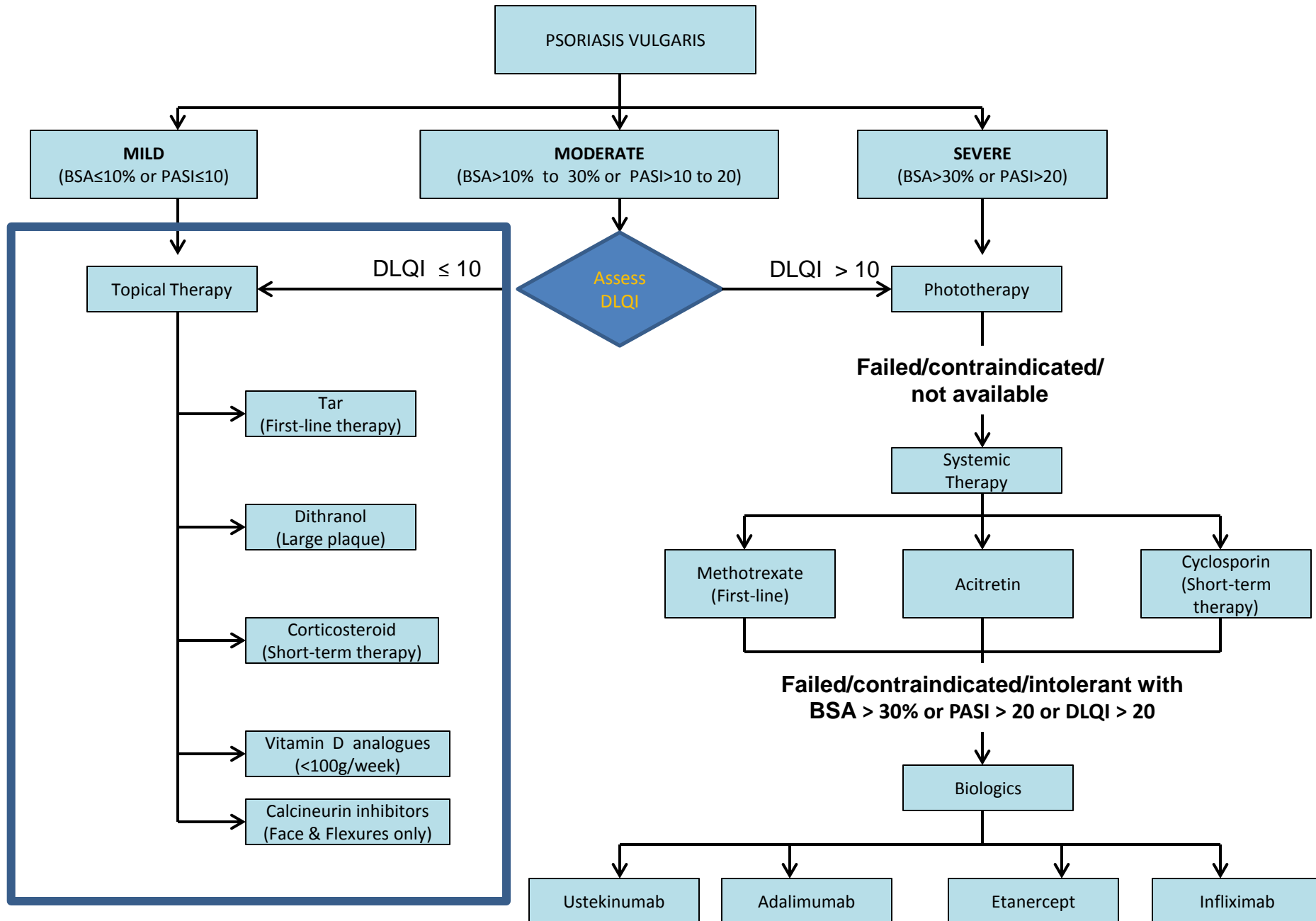
# LEARNING OBJECTIVES

- To be able to select appropriate topical therapy to treat mild & moderate psoriasis
- To know the strengths & preparations of the topical therapy
- To know the expected treatment response
- To know the common adverse effects of the topical therapy

# INTRODUCTION

- Topical therapy is the mainstay of treatment for mild or moderate psoriasis with minimal impairment of quality of life (QoL)
- Success of treatment is dependent on patient's compliance
- Patient education is important

## ALGORITHM 2: TREATMENT OF PSORIASIS VULGARIS



# COMMONLY USED TOPICAL AGENTS

- Emollients
- Corticosteroids
- Tar-based treatment
- Dithranol
- Vitamin D analogues
- Calcineurin inhibitors (tacrolimus & pimecrolimus)
- Salicylic acid

# TOPICAL EMOLLIENTS

- Routinely used as moisturizers
- May have some steroid-sparing effect
  - Restore normal hydration and epidermal barrier function
- Recommendation : Should be used regularly



# TOPICAL TAR

- Has been used for many years
- Mechanism of action is unclear
- Reduce cell turnover, anti-inflammatory, anti-keratolytic
- Few good quality evidence
- Efficacy (*Mason AR et al systemic review 2009*) :
  - As efficacious as placebo
  - Less than calcipotriol



# TOPICAL TAR

- First line topical treatment in Malaysia
- Available as creams, ointments, lotions, pastes, scalp treatments, bath additives and shampoos





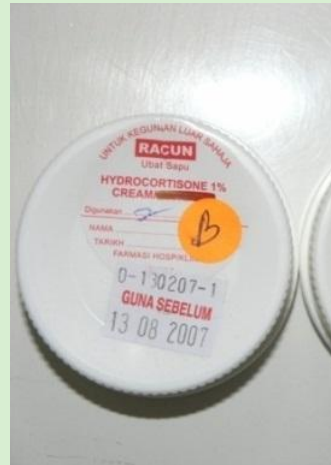
# TOPICAL TAR

## side effects

- Side effects:
  - Staining, irritation, folliculitis
  - No increase in cancer (Roelofzen JH et al 2010)
- Should not be used on body folds, face and genitalia

# TOPICAL CORTICOSTEROIDS

- Most widely used agent
- Mechanisms of action
  - anti-inflammatory
  - Antiproliferative
  - immunosuppressive
  - vasoconstrictive



- Available in cream, ointment, gel, spray, lotion
- Short-term use of potent and very potent topical corticosteroid used for rapid clearance (*Cochrane systemic review 2009*)

# TOPICAL CORTICOSTEROIDS

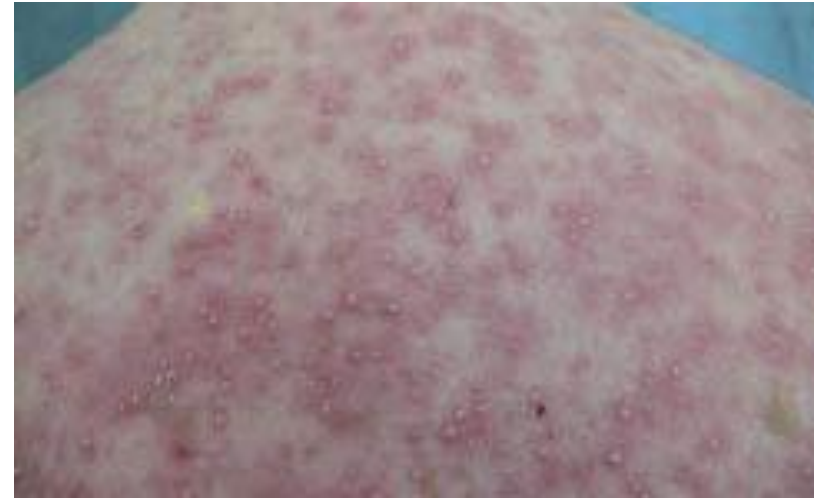
## Side effects

- There were no significant adverse local and systemic events for both potent and very potent steroids (*Cochrane review 2009, Bruner et al 2003*)
- Use on extensive lesions or large areas may result in skin atrophy and systemic absorption
- Face, genitalia and body folds
  - Avoid potent/very potent corticosteroids
  - Use mild potency corticosteroids

# Side effect of topical steroid



Skin atrophy with easy bruising



Acneiform eruption



Hypopigmentation



striae

## Side effect of Topical Steroids



Striae






# TOPICAL CORTICOSTEROIDS

## Limitations

- Potent corticosteroids:
  - Limit use  $< 60\text{gm/week}$
  - Continuous use should not exceed 4 weeks
- Super potent corticosteroids:
  - Limit use to  $< 30\text{gm/week}$
  - Continuous use should not exceed 2 weeks





DRUG	RECOMMENDED DOSAGE	SIDE EFFECTS	CONTRAINDICATIONS	SPECIAL PRECAUTION	DRUG INTERACTION	PREGNANCY CATEGORY
Potent						
Betamethasone 17-Valerate 0.1% Cream/ Ointment	Apply thinly 1–2 times daily	spread and worsening of untreated infection; thinning of the skin; contact dermatitis; perioral dermatitis; acne, or worsening of acne or rosacea; mild depigmentation; hypertrichosis also reported.	untreated bacterial, fungal, or viral skin lesions, in rosacea, and in perioral dermatitis	Prolonged use on the face; keep away from eyes	C	C
						
Mometasone Furoate 0.1% Cream	Apply thinly once daily	Bacterial skin infection, burning, furunculosis, pruritus, skin atrophy, tingling/stinging	untreated bacterial, fungal, or viral skin lesions, in rosacea, and in perioral dermatitis		C	Fetal risk cannot be ruled out
						
Very Potent						
Clobetasol Propionate 0.05% Cream/ ointment	Apply thinly 1–2 times daily for up to 4 weeks; max.  50 g of 0.05% preparation per week	spread and worsening of untreated infection; thinning of the skin; contact dermatitis; perioral dermatitis; acne, or worsening of acne or rosacea; mild depigmentation; hypertrichosis also reported.	untreated bacterial, fungal, or viral skin lesions, in rosacea, and in perioral dermatitis	Prolonged use on the face; keep away from eyes	C	
						



# DITHRANOL

- Also known as anthralin
- Anti-proliferative and anti-inflammatory drug
- Efficacy:
  - more efficacious than placebo
  - as efficacious as Vitamin D analogues
- Side effects:
  - Irritation
  - Burning
  - staining



# DITHRANOL

- Side effects:
  - Irritation
  - Burning
  - Staining
- Apply accurately to affected plaques as short contact (20-30 minutes) therapy
- Dithranol may be used in patients with a few large thick plaques

# TOPICAL VITAMIN D ANALOGUES

- Calcipotriol (Daivonex cream), Calcipotriol/betamethasone dipropionate ointment (Daivobet)
- Efficacy (*Cochrane systemic review 2009*) :
  - more efficacious than placebo, coal tar, tacrolimus
  - as efficacious as potent steroids, very potent steroid and dithranol

# TOPICAL VITAMIN D ANALOGUES

- Side effects:
  - Irritation
  - Pruritus
- The two-compound preparation containing calcipotriol and potent steroid :
  - was more efficacious than either constituent alone
  - causes less local adverse event compared to calcipotriol alone

# TOPICAL VITAMIN ANALOGUES

- Total amount of calcipotriol used should not exceed >100g/week to avoid hypercalcemia



# TOPICAL CALCINEURIN INHIBITORS

- Topical tacrolimus and pimecrolimus are efficacious for face and flexures
- Side effects:
  - Stinging
  - Burning
  - Itch
- However, its use is not licensed for the treatment of psoriasis in Malaysia



# TOPICAL SALICYLIC ACID

- Topical keratolytic used for many years
- May reduce keratinocyte -to-keratinocyte binding
- Leads to reduced scaling and softening of psoriatic plaques
- Used on thick and scaly lesion
- Can be used in combination with topical steroid



# TOPICAL SALICYLIC ACID

- Efficacy:
  - more efficacious than placebo (*Cochrane systemic review 2009*)
  - In combination with corticosteroid is as efficacious as calcipotriol (*Cochrane systemic review 2009*)





# Malaysian CPG on the management of Psoriasis vulgaris

## Topical therapy

### RECOMMENDATION

- Emollient should be used regularly in psoriasis. **(Grade C)**
- Coal tar may be used as a first-line topical therapy for psoriasis. **(Grade A)**
- Dithranol may be used for psoriasis patients with a few large thick plaques. **(Grade A)**
- Vitamin D analogue and steroid fixed dose combination may be used for short-term treatment of psoriasis. **(Grade A)**
- Vitamin D analogue may be used for treatment of psoriasis. **(Grade A)**
- Topical salicylic acid may be used for plaque psoriasis. **(Grade A)**

# Malaysian CPG on the management of Psoriasis vulgaris

## Topical therapy

### Recommendation

- Short-term use of potent and very potent topical corticosteroid may be used to gain rapid clearance in psoriasis patients with limited plaques. **(Grade A)**
  - These preparations should be avoided on the face, genitalia and body folds. **(Grade C)**
  - Limit use of super potent steroid to less than 30gm/week. **(Grade C)**
  - Limit use of potent steroid to less than 60gm/week. **(Grade C)**
- Continuous use of potent corticosteroid should not exceed four weeks. **(Grade C)**
- Continuous use of super potent corticosteroid should not exceed two weeks. **(Grade C)**
- Mild potency corticosteroid may be used for face, genitalia and body folds. **(Grade C)**