

# CLINICAL PRACTICE GUIDELINES

JUNE 2013

MOH/P/PAK/266.13(GU)

## MANAGEMENT OF PSORIASIS VULGARIS



Ministry of Health Malaysia



Dermatological Society of Malaysia



Academy of Medicine Malaysia

## Case Discussion: *Moderate Psoriasis*

Clinical Practice Guidelines  
Management of Psoriasis  
Development Group

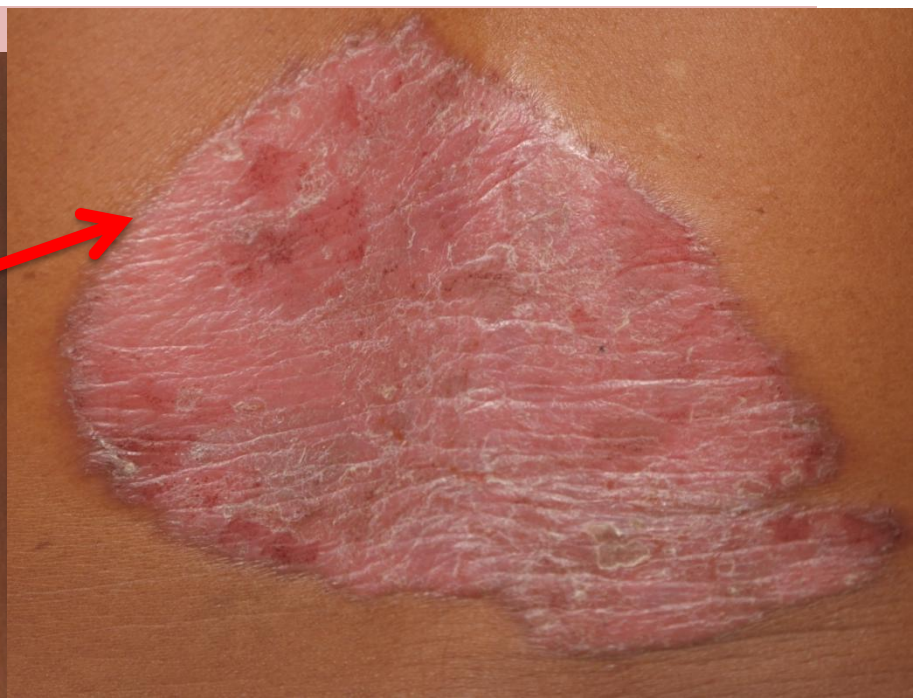
# CASE 1



# History

- 35 y/o man
- C/O: skin rash over scalp, trunk and limbs for 1 year
- Associated with itch
- No joint pain
- No family history of similar rash
- No past medical / surgical history
- Not on medication / TCM









# Questions

- 1) What is your clinical diagnosis?
  - Chronic Plaque Psoriasis
- 2) What are the important assessment?
  - i. Assessment of disease severity
    - Extent of lesions
    - Effect on quality of life
  - ii. Assess for arthropathy
  - iii. Assess for co-morbidities (Metabolic syndrome, CVS disease, depression)-BP, BMI,FSL, FBS, ECG

# Questions

- 3) What tools do you use to assess psoriasis severity?

Assessment of severity – tools available

A. Extent of lesions

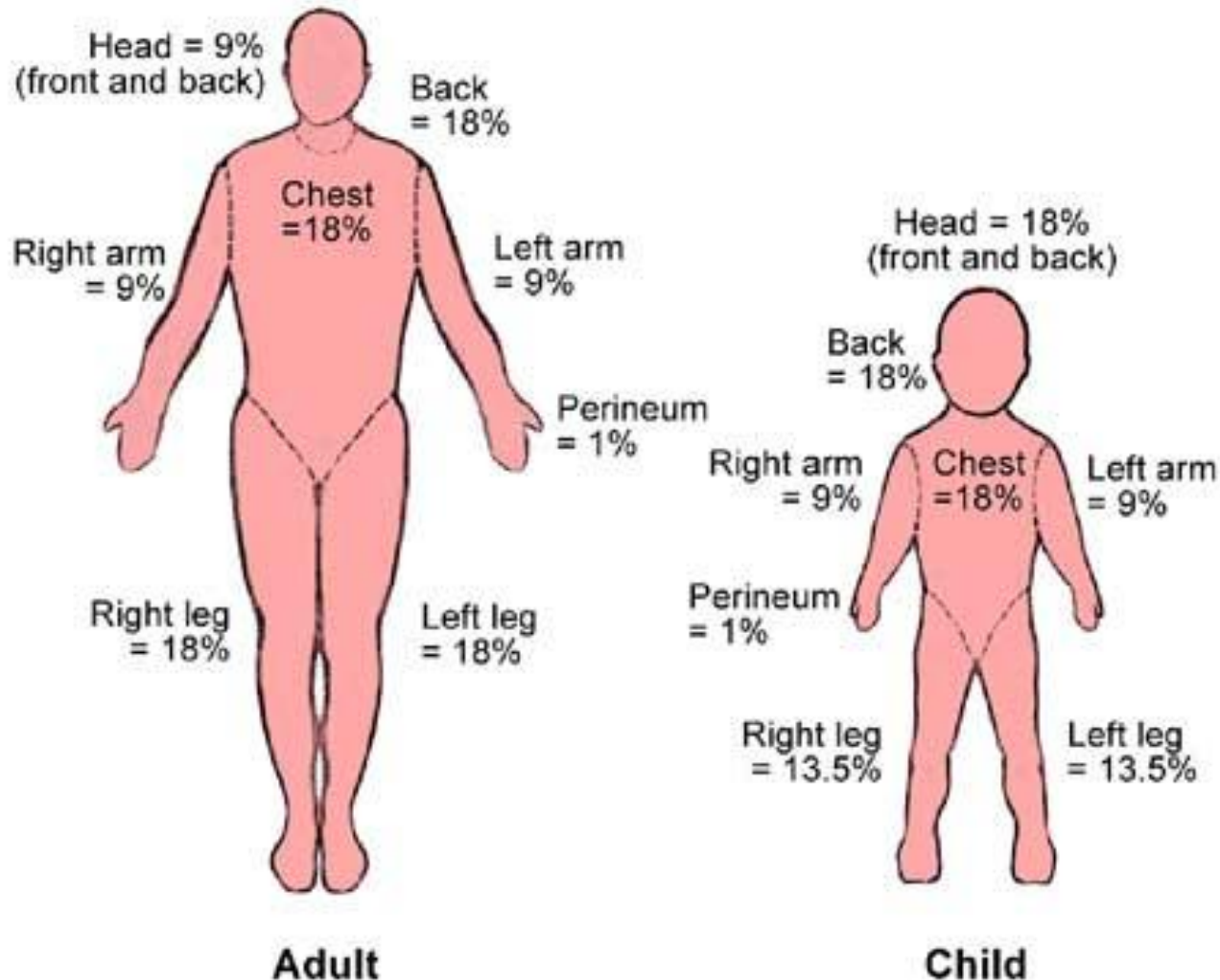
1. Body surface area (BSA)
2. Psoriasis Area Severity Index (PASI)

B. Effect on quality of life

- Dermatology Life Quality Index (DLQI)

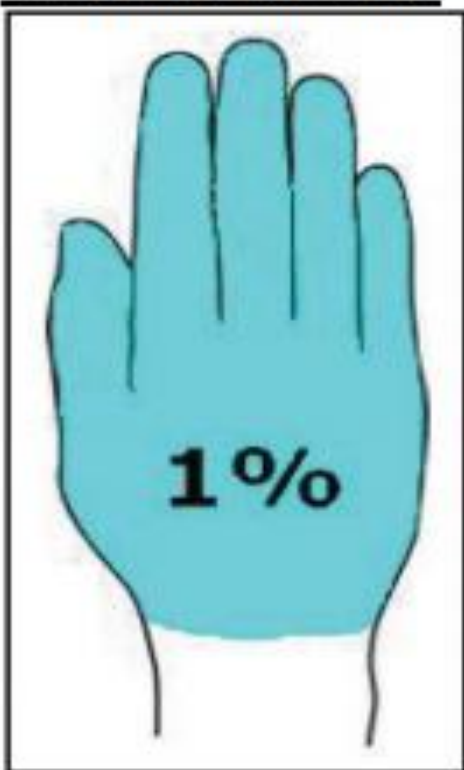


# 1) Body surface area: Rule of Nine



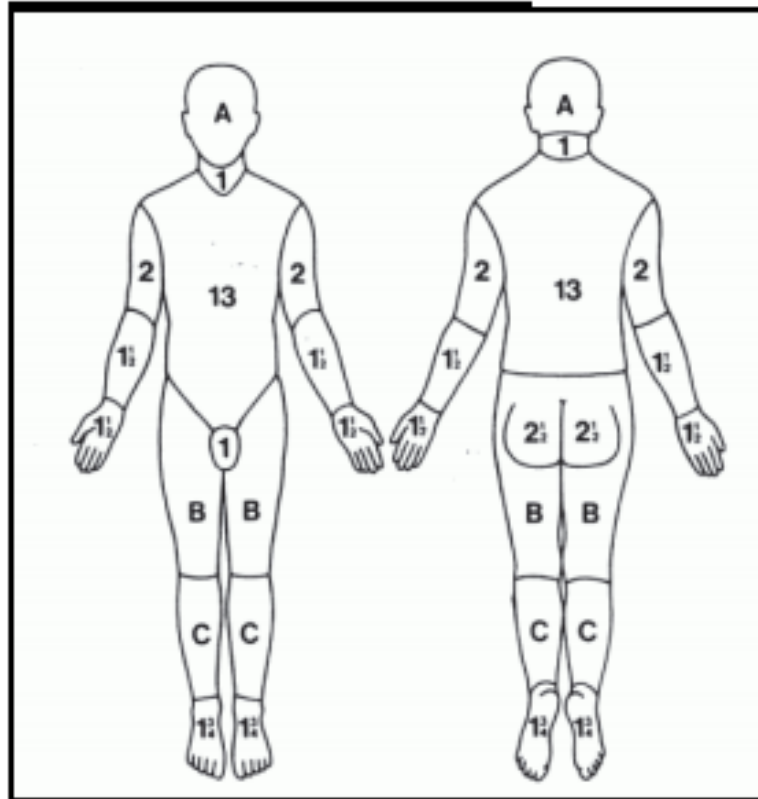
# Body surface area: other methods

Or Hand Method



Palm and fingers  
of the patient =  
1% TBSA

Or Lund & Browder Chart



Age	0	1	5	10	15	Adult
A	9.5	8.5	6.5	5.5	4.5	3.5
B	2.75	3.25	4	4.5	4.5	4.75
C	2.5	2.5	2.75	3	3.25	3.5

## 2) PASI

=**P**сориаз **A**rea and **S**everity **I**ndex

- A tool used to measure the severity and extent of psoriasis
- Widely used in clinical research
- PASI combines the assessment of the severity of lesions and the area affected into a single score
  - Score : 0 (no disease) to 72 (maximal disease)



# Psoriasis Area and Severity Index (PASI\*): assessment

Patient's name .....UR/Patient no. ....

Date .....Time .....

Assessor.....

$$\text{Head: } 0.1 \times \boxed{\text{Area}} \times \left( \boxed{\text{Erythema}} + \boxed{\text{Scaliness}} + \boxed{\text{Thickness}} \right) = \boxed{\phantom{000}}$$

$$\text{Trunk: } 0.3 \times \boxed{\text{Area}} \times \left( \boxed{\text{Erythema}} + \boxed{\text{Scaliness}} + \boxed{\text{Thickness}} \right) = \boxed{\phantom{000}}$$

$$\text{Legs: } 0.4 \times \boxed{\text{Area}} \times \left( \boxed{\text{Erythema}} + \boxed{\text{Scaliness}} + \boxed{\text{Thickness}} \right) = \boxed{\phantom{000}}$$

$$\text{Arms: } 0.2 \times \boxed{\text{Area}} \times \left( \boxed{\text{Erythema}} + \boxed{\text{Scaliness}} + \boxed{\text{Thickness}} \right) = \boxed{\phantom{000}}$$

Minimum PASI score = 0; Maximum PASI score = 72

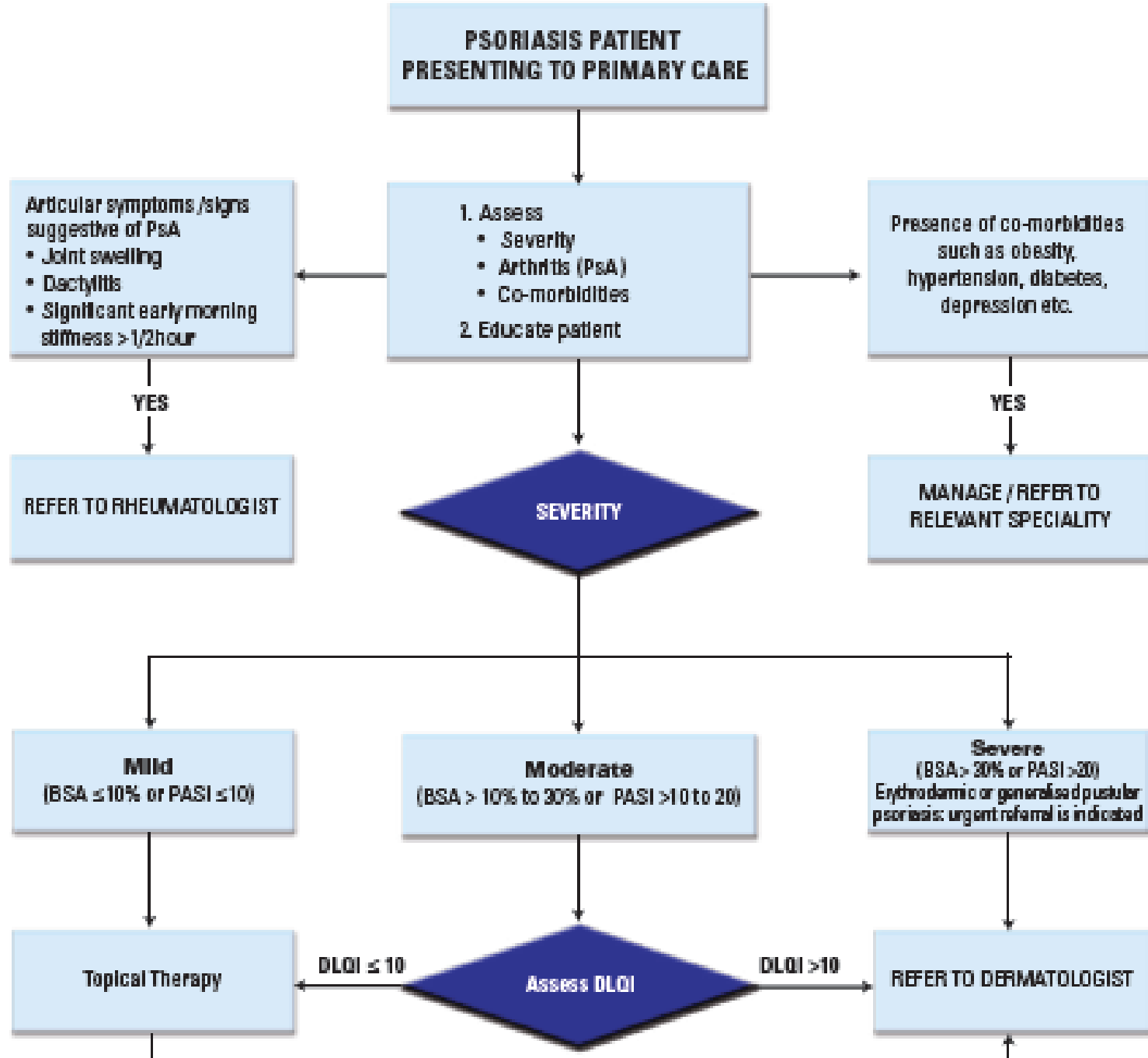
Total  
PASI score

\*Fredriksson T, Pettersson U. Severe psoriasis – oral therapy with a new retinoid. *Dermatologica* 1978; 157: 238–44.

Score	Area	Erythema	Scaliness	Thickness
0	No psoriasis involvement for the region			
1	<10%	Slight pink	Fine scale	Slight plaque elevation
2	10<30%	Pink	Coarse scales with most lesions partially covered by scale	Moderate elevation with rounded or sloped edges
3	30<50%	Red	Coarse scales with almost all lesions covered and a rough surface	Marked elevation with marked sharp edges
4	50<70%	Dark red/purple	Very coarse thick scales covering all lesions, very rough surface	Very marked elevation with very hard sharp edges
5	70<90%			
6	90-100%			

# Definition of Psoriasis Severity:

Psoriasis Severity	Definition		
	BSA	PASI	DLQI
Mild	$\leq 10\%$	$\leq 10$	$\leq 10$
Moderate	$>10\% - 30\%$	$>10-20$	$>10-20$
Severe	$>30\%$	$>20$	$>20$





# Dermatology Life Quality Index

## DERMATOLOGY LIFE QUALITY INDEX

Hospital No:  
Name:  
Address:

Date:

Diagnosis:

DLQI

Score:

The aim of this questionnaire is to measure how much your skin problem has affected your life OVER THE LAST WEEK. Please tick ☐ one box for each question.

- |  |                                     |                                       |
|--|-------------------------------------|---------------------------------------|
| 1. Over the last week, how itchy, sore, painful or stinging has your skin been?  | Very much <input type="checkbox"/>  |                                       |
|  | A lot <input type="checkbox"/>      |                                       |
|  | A little <input type="checkbox"/>   |                                       |
|  | Not at all <input type="checkbox"/> |                                       |
| 2. Over the last week, how embarrassed or self conscious have you been because of your skin?                           | Very much <input type="checkbox"/>  |                                       |
|  | A lot <input type="checkbox"/>      |                                       |
|  | A little <input type="checkbox"/>   |                                       |
|  | Not at all <input type="checkbox"/> |                                       |
| 3. Over the last week, how much has your skin interfered with you going shopping or looking after your home or garden? | Very much <input type="checkbox"/>  |                                       |
|  | A lot <input type="checkbox"/>      |                                       |
|  | A little <input type="checkbox"/>   |                                       |
|  | Not at all <input type="checkbox"/> | Not relevant <input type="checkbox"/> |
| 4. Over the last week, how much has your skin influenced the clothes you wear?   | Very much <input type="checkbox"/>  |                                       |
|  | A lot <input type="checkbox"/>      |                                       |
|  | A little <input type="checkbox"/>   |                                       |
|  | Not at all <input type="checkbox"/> | Not relevant <input type="checkbox"/> |
| 5. Over the last week, how much has your skin affected any social or leisure activities?                               | Very much <input type="checkbox"/>  |                                       |
|  | A lot <input type="checkbox"/>      |                                       |
|  | A little <input type="checkbox"/>   |                                       |
|  | Not at all <input type="checkbox"/> | Not relevant <input type="checkbox"/> |

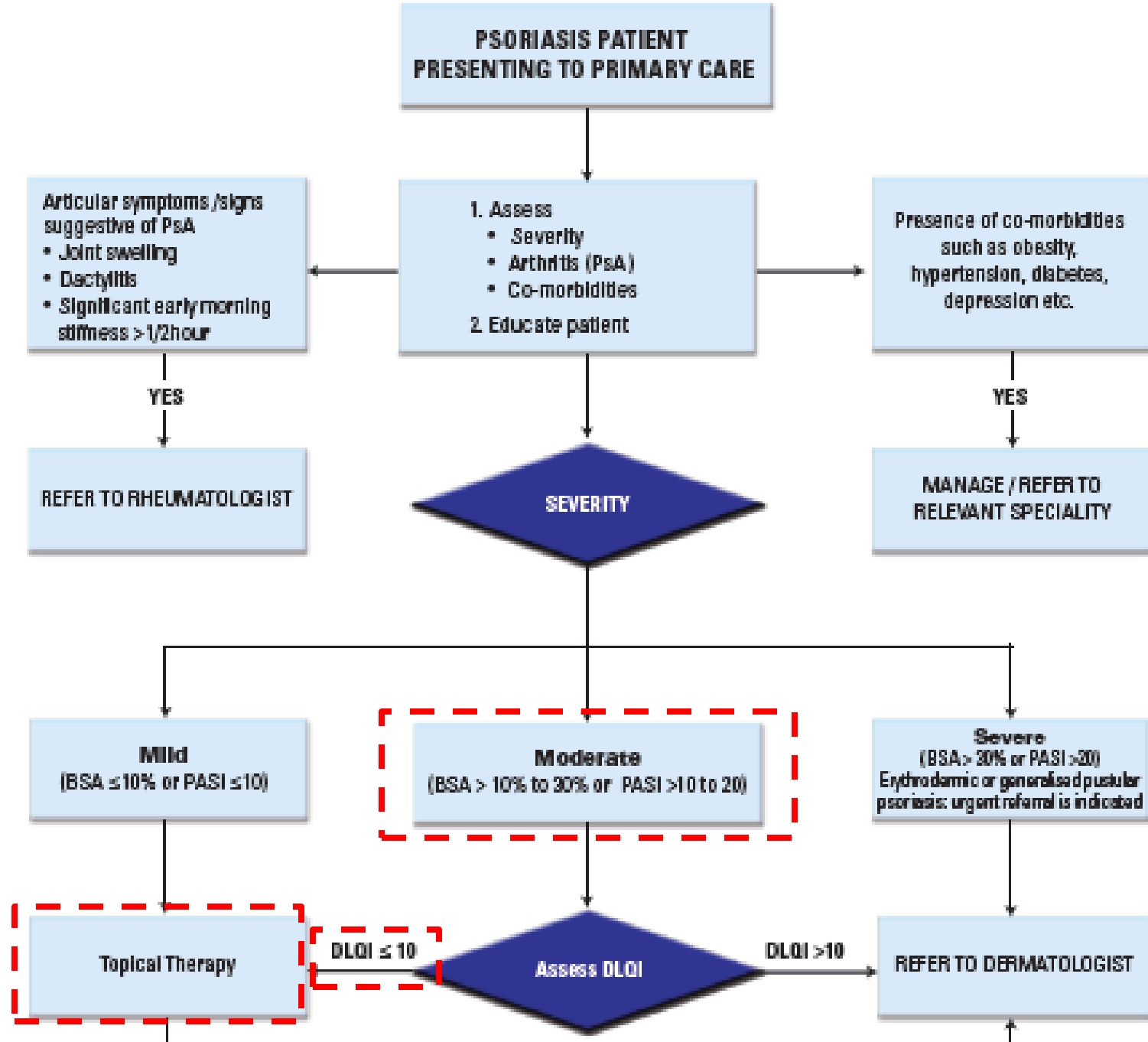
- |  |                                     |                                       |
|--|-------------------------------------|---------------------------------------|
| 6. Over the last week, how much has your skin made it difficult for you to do any sport?   | Very much <input type="checkbox"/>  |                                       |
|  | A lot <input type="checkbox"/>      |                                       |
|  | A little <input type="checkbox"/>   |                                       |
|  | Not at all <input type="checkbox"/> | Not relevant <input type="checkbox"/> |
| 7. Over the last week, has your skin prevented you from working or studying?   | Yes <input type="checkbox"/>        |                                       |
|  | No <input type="checkbox"/>         | Not relevant <input type="checkbox"/> |
| If "No", over the last week how much has your skin been a problem at work or studying?   | A lot <input type="checkbox"/>      |                                       |
|  | A little <input type="checkbox"/>   |                                       |
|  | Not at all <input type="checkbox"/> |                                       |
| 8. Over the last week, how much has your skin created problems with your partner or any of your close friends or relatives?                      | Very much <input type="checkbox"/>  |                                       |
|  | A lot <input type="checkbox"/>      |                                       |
|  | A little <input type="checkbox"/>   |                                       |
|  | Not at all <input type="checkbox"/> | Not relevant <input type="checkbox"/> |
| 9. Over the last week, how much has your skin caused any sexual difficulties?  | Very much <input type="checkbox"/>  |                                       |
|  | A lot <input type="checkbox"/>      |                                       |
|  | A little <input type="checkbox"/>   |                                       |
|  | Not at all <input type="checkbox"/> | Not relevant <input type="checkbox"/> |
| 10. Over the last week, how much of a problem has the treatment for your skin been, for example by making your home messy, or by taking up time? | Very much <input type="checkbox"/>  |                                       |
|  | A lot <input type="checkbox"/>      |                                       |
|  | A little <input type="checkbox"/>   |                                       |
|  | Not at all <input type="checkbox"/> | Not relevant <input type="checkbox"/> |

Please check you have answered EVERY question. Thank you.

# Questions

- 3) How do you assess psoriasis severity in this patient ?
  - BSA: 15% → Moderate psoriasis
  - DLQI: 8 → Mild effect on his life

***Imp: Moderate Psoriasis***





# Questions

ii) Treatment:





- ***1<sup>st</sup> line : Topical treatment:***

- Polytar shampoo 2x per week
- 2% Salicylic acid + BVC 1:2 BD
- BVC 0.1% OM
- 3% LPC in U/E ON
- Aqueous cream as emollient

# Treatment

Topical Rx	Phototherapy	Systemic Rx
Coal Tar	NB-UVB	Methotrexate
Topical steroids	Oral PUVA	Acitretin (Retinoid)
Vit D <sub>3</sub> analogues	Bath PUVA	Cyclosporin
Keratolytics	Topical PUVA	Sulphasalazine
Dithranol (anthralin)	308nm Excimer laser	Hydroxyurea
Emollients		Biologics
Topical retinoid		

# 1) Topical Steroids

Potency	Steroid	
Mild	Hydrocortisone	
Moderate	Clobetasone butyrate (Eumovate)	
Potent	Betamethasone valerate (Betnovate) Mometasone furoate (Elomet) Fluticasone propionate (Cutivate)	
Super-potent	Betamethasone dipropionate Clobetasone propionate (Dermovate)	

# Appropriate choice of steroid

- Consider:
  - disease severity
  - location being treated
  - age of the patient
- Lower potency corticosteroids :
  - Face, intertriginous areas, in infants
- Mid or high-potency agents
  - Used as initial therapy other areas and in adults



## 2) Vitamin D analogues

- Vitamin D3 analogues
  - Calcipotriol (Daivonex) cream bd
  - Calcipotriol/ betamethasone dipropionate ointment (Daivobet) ON
- Function as a corticosteroid- sparing agent



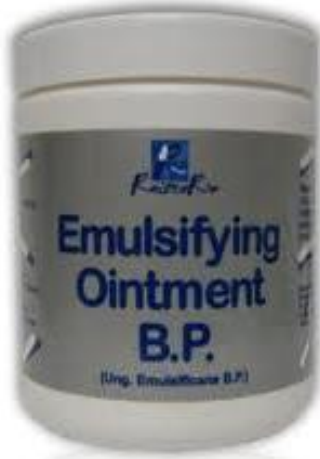
### 3) Coal tar

- Adverse effects
  - staining of clothes and the tar odor
  - Irritant contact dermatitis



## 4) Non-medicated topical moisturizers

- Standard adjunctive therapy in treatment of psoriasis
- Goal of treatment
  - provide moisture
  - retain moisture



## 4) Others

### a) Tacrolimus and Pimecrolimus

- May be used in thinner skin areas such as facial and intertriginous psoriasis



### b) Salicylic acid-keratolytic agents

### c) Anthralin



# Treatment Goals

**TABLE: TREATMENT GOALS OF VARIOUS MODALITIES**

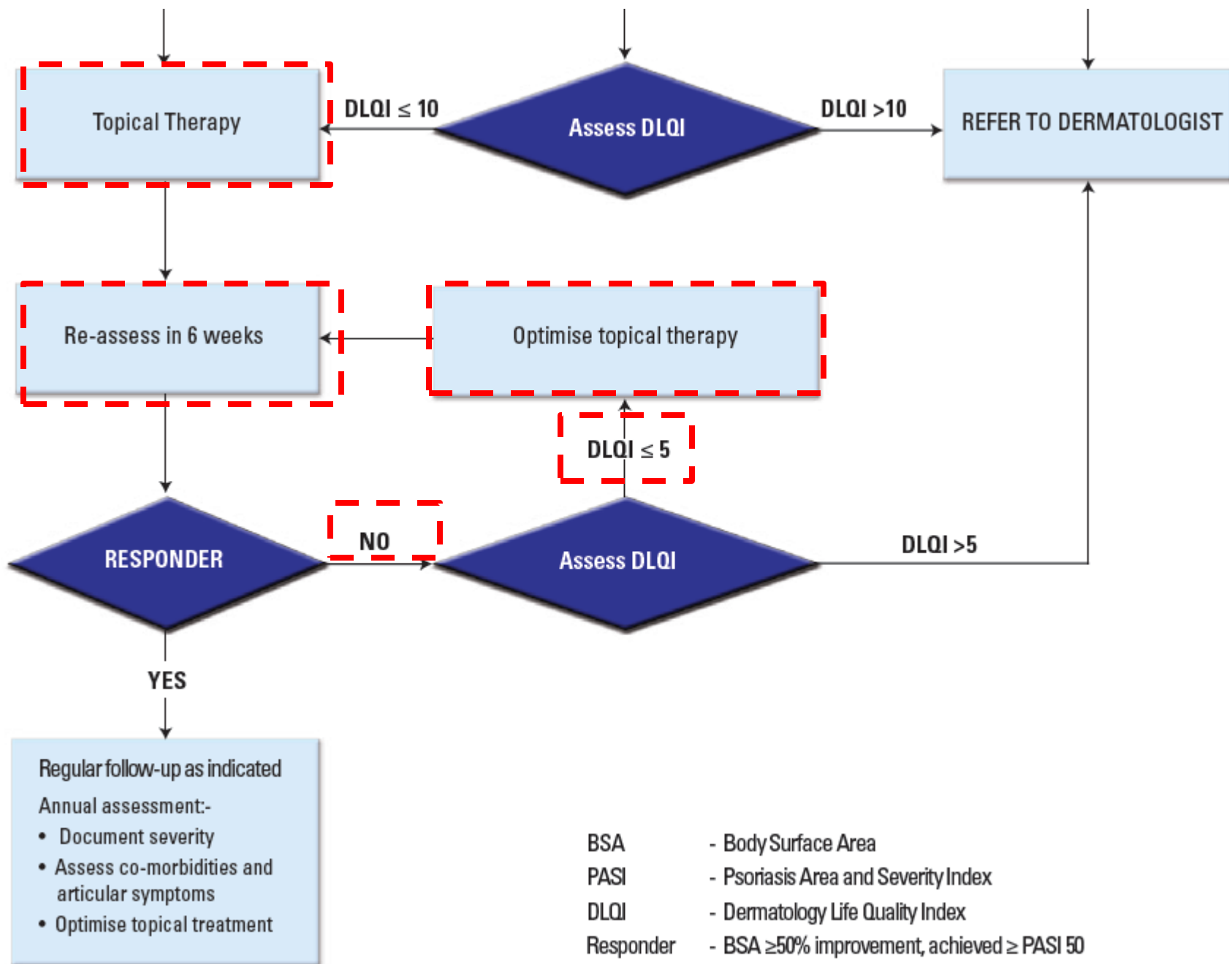
TREATMENT	MINIMAL TARGETS	TIME FOR EVALUATION (WEEKS)	SUBSEQUENT EVALUATION (MONTHS)
Topical therapy	$\downarrow$ BSA $\geq 50$ or PASI $\geq 50$ or DLQI $\leq 5$	6	6 – 12
Phototherapy	$\downarrow$ BSA $\geq 75$ or PASI $\geq 75$ or DLQI $\leq 5$	6	6
Methotrexate		16	
Cyclosporine		16	
Acitretin		12	
Infliximab	PASI $\geq 75$ OR PASI 50 to $<75$ plus DLQI $\leq 5$	10	6
Adalimumab		16	
Ustekinumab		16	
Etanercept		24	



# Questions

- 4) 6 weeks later, patient came back and told you “ Dr, your treatment is not effective! I am still having the skin lesions!” What is your next plan?

Reassess severity: BSA: 12%, DLQI : 5

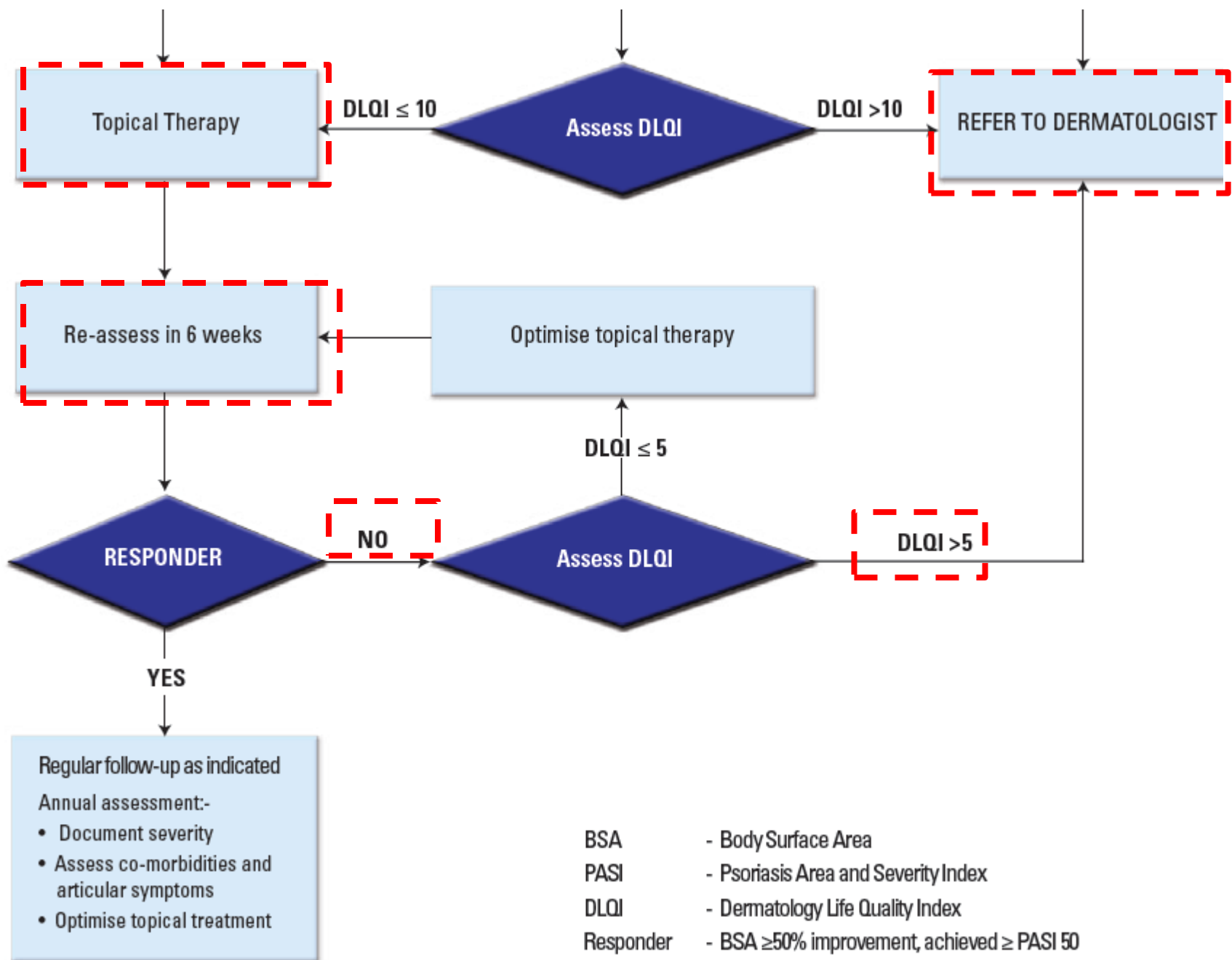


# Your next step.....

- I. Assess compliance and tolerability to the treatment
  - Reemphasize on the compliance
- II. Consider to change to another topical agent
- III. Reassurance

# Questions

- 5) The patient was prescribed with new topical agents. However he came back again 6 week later and told you “ Dr, my skin lesions is worsening! I can’t stand it anymore!!!!” What is your next plan?
  - i. Assess severity: BSA: 15%, DLQI : 8
  - ii. Refer to the nearest Dermatologist for further management





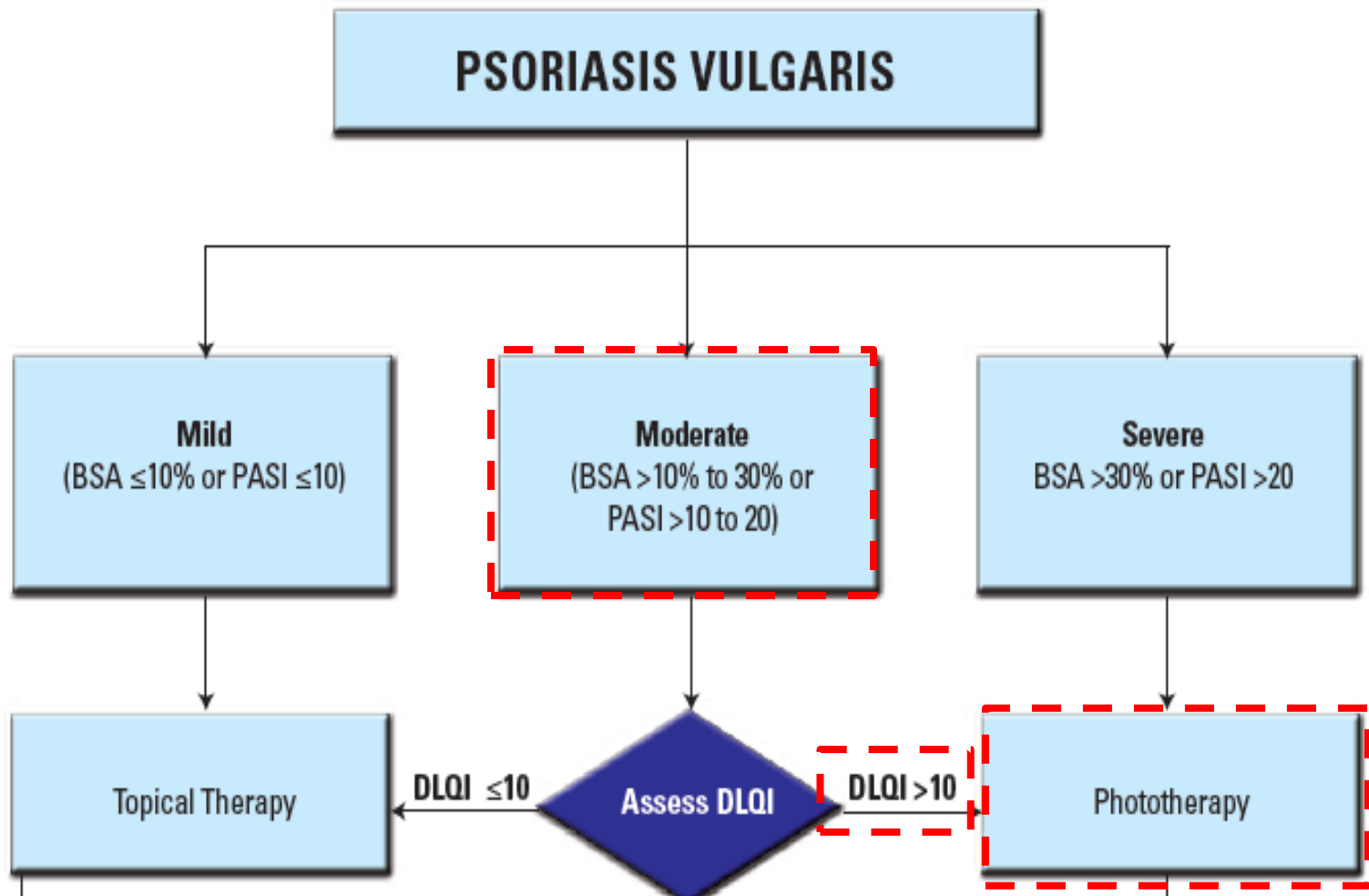
# Questions

- 6) What is the next treatment that a dermatologist can offer ?
  - I. Reassess severity and compliance to the treatment
  - II. Offer patients optimization of topical agent
  - III. Consider phototherapy/systemic agents

# Assessment

- Patient was reassessed:
  - BSA : 15%, DLQI : 12
- Offer option of phototherapy

# Next step....



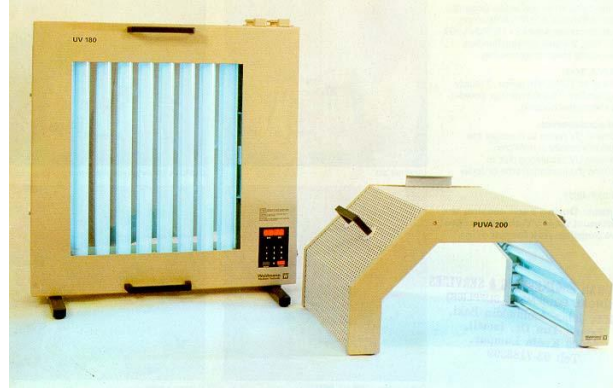
# Phototherapy

- This patient was then started on phototherapy (NBUVB 3 times per week).....

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TREATMENT	MINIMAL TARGETS	TIME FOR EVALUATION (WEEKS)	SUBSEQUENT EVALUATION (MONTHS)
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# Phototherapy





# Phototherapy



# 6 weeks after phototherapy....

- The patient responded well to treatment...
  - BSA =3% ( Reduction of 80% from the baseline of 15% BSA)
  - DLQI=5

*Patient has achieved Treatment Goal!*

# Questions

- 7) How long can you continue NBUVB?
  - There is no good data to suggest maintenance therapy
  - NBUVB therapy should not exceed 350 sessions in a life time