

# CLINICAL PRACTICE GUIDELINES

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## MANAGEMENT OF PSORIASIS VULGARIS



Ministry of Health Malaysia



Dermatological Society of Malaysia



Academy of Medicine Malaysia

## CO-MORBIDITIES

### Clinical Practice Guidelines Management of Psoriasis Development Group

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# Learning Objectives

- To understand the association between psoriasis and metabolic syndrome
- To know the various definitions of metabolic syndrome
- To understand the risk of metabolic abnormalities associated with psoriasis
- To understand the risk of psoriasis patients having atherosclerosis and atherosclerosis-related diseases
- To understand the risk of psoriasis patients having malignancy, psychiatry co-morbidities and inflammatory bowel diseases

# Definitions of Metabolic Syndrome

	NCEP ATP III	Revised NCEP ATP III	Modified NCEP ATP II criteria for South Asian
Risk Factor	Defining Level	Defining Level	Defining Level
Abdominal obesity (waist circumference) Men Women	> 102 cm (> 40 in) > 88 cm (>35 in)	> 102 cm (> 40 in) > 88 cm (>35 in)	≥ 90 cm ≥ 80 cm
Triglycerides	≥ 150mg/dl	≥ 150mg/dl	≥ 150mg/dl
HDL cholesterol Men Women	< 40mg/dl < 50mg/dl	< 40mg/dl < 50mg/dl	< 40mg/dl < 50mg/dl
Blood pressure	≥ 130/≥ 85 mmHg	≥ 130/≥ 85 mmHg	≥ 130/≥ 85 mmHg
Fasting glucose	≥ 110 mg/dl*	≥ 100 mg/dl*	≥ 110 mg/dl*

# Definition of Metabolic Syndrome based on WHO clinical criteria

Insulin resistance, identified by 1 of the following:

- Type 2 diabetes
- Impaired fasting glucose
- Impaired glucose tolerance
- Or for those with normal fasting glucose levels (110 mg/dL), glucose uptake below the lowest quartile for background population under investigation under hyperinsulinemic, euglycemic conditions

Plus any 2 of the following:

- Antihypertensive medication and/or high blood pressure ( $\geq 140$  mm Hg systolic or  $\geq 90$  mm Hg diastolic)
- Plasma triglycerides  $\geq 150$  mg/dL ( $\geq 1.7$  mmol/L)
- HDL cholesterol  $< 35$  mg/dL ( $< 0.9$  mmol/L) in men or  $< 39$  mg/dL (1.0 mmol/L) in women
- BMI  $> 30$  kg/m<sup>2</sup> and/or waist:hip ratio  $> 0.9$  in men,  $> 0.85$  in women
- Urinary albumin excretion rate  $\geq 20$  g/min or albumin : creatinine ratio  $\geq 30$  mg/g

# Metabolic syndrome & it's components

- Prevalence of metabolic syndrome is increased in patients with Psoriasis (OR=1.3-5.9)
- This associated is stronger in patients with severe psoriasis (OR=1.98) compared with those with mild psoriasis (OR=1.22)
- Metabolic abnormalities associated with psoriasis include
  - Abdominal obesity (OR=1.72)
  - Hypertriglyceridaemia (OR=2.08)
  - Hypertension (OR=1.03-1.49)
  - Diabetes mellitus (OR=1.13-1.42)

# Atherosclerosis and related diseases <sup>(1)</sup>

Psoriasis patients has higher risk of atherosclerosis (OR= 2.2) and atherosclerosis-related diseases like

- Ischaemic heart disease (OR=1.8)
- Cerebrovascular diseases (OR=1.7)
- Peripheral vascular disease (OR=2.0)

Patients with severe psoriasis have a significant 1.6-fold increase risk of CV mortality and the risk is higher in younger patients (RR of 2.7 and 1.9 for a 40-year-old is and a 60-year-old respectively)

## Atherosclerosis and related diseases (2)

Patients with psoriasis had increase risk of diabetes, hypertension, hyperlipidaemia, obesity and smoking than controls (adjusting for age, gender, person-years)

Diabetes (OR=1.4) and obesity (OR=1.5) were more prevalent in those with moderate-severe psoriasis than mild psoriasis

Asian study showed that increasing BMI was associated with increasing severity of psoriasis ( $p=0.004$ ) particularly in men ( $p=0.002$ )

# Malignancy

Psoriasis has an elevated risk of malignancies (HR=1.7) especially in male patients (HR=1.9) based on Taiwan database

Namely

1. Cancer of the lips
2. Oropharynx & larynx
3. Liver & gallbladder
4. Colon, rectum & peritoneum
5. Urinary bladder
6. Malignant melanoma



# Psychiatric co-morbidities

Patient with psoriasis have higher risk of

1. Depression (HR=1.39)
2. Anxiety (HR=1.31)
3. Suicidality (HR=1.4)

**\*\* Especially in severe disease**

## Inflammatory bowel diseases (Ulcerative colitis and Crohn's disease)

Psoriasis is associated with increased risk of ulcerative colitis (OR=1.6)

The risk of Crohn's disease however varies between countries probably due to genetic influence. The risk is not increased in Taiwan (RR=0.7) but is high in Israel (OR=2.5)

## TAKE HOME MESSAGE

- Psoriasis is associated with higher risk of metabolic syndrome, atherosclerosis and atherosclerosis-related diseases, malignancy, psychiatric disorders and inflammatory bowel disease
- Psoriasis patients should be screened early for the associated co-morbidities so that appropriate treatment can be instituted

# Malaysian CPG on the management of Psoriasis vulgaris Co-morbidities

## RECOMMENDATION

- Patient with psoriasis or psoriatic arthritis should be encouraged to adopt a healthy lifestyle **(Grade C)**
  - regular exercise
  - maintain healthy body weight [Body Mass Index 18.5 - 24.9]
  - stop smoking, stop drinking or drink alcohol in moderation.
- Assessment of patient with psoriasis should include psychosocial measures and patients should be referred to mental health services if necessary. **(Grade C)**
- Psoriasis patients should be screened for metabolic syndrome and risk factors of atherosclerosis-related diseases. **(Grade C)**