Key Publication Summary Messages for Women: **Burden of Comorbidities in Psoriasis**

This material is a collection of infographics regarding common comorbidities for patients with psoriasis, particularly women



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Methodology and Contents Summary

A literature search was conducted using search criteria agreed by the Faculty. PubMed and Google Scholar were searched using the selected criteria and the top two result pages were searched for English publications published from 2019-2022. The Faculty reviewed the publications and selected key content for inclusion which could be most relevant for treating women with psoriasis and associated comorbidities in clinical practice



Information specifically relevant to your female patients is highlighted with this icon in each infographic



Click on this icon on each infographic to return to this contents page

Inflammatory Bowel Disease (IBD)





Female sex and PsA are risk factors for IBD.¹ Women with psoriasis have 2.3 times higher odds (OR: 2.3) of Crohn's disease (CD) compared with women without psoriasis²

Mental Health and Psychological Wellbeing



Among women with psoriasis, there is a strong interdependence between their physical, emotional and social wellbeing

Women with psoriasis have a lower quality of life...

Sexual dysfunction³



Chronic sleep dysfunction⁴

Higher psychological distress^{5–8}

Psoriatic Arthritis (PsA)



Screening psoriasis patients for PsA is essential at each visit as cutaneous disease precedes arthritis in 72.7% of patients⁹

Joint involvement is more likely in women with psoriasis compared to those without:²

OR 95% CI 3.0-3.5

OR 44.7



Axial spondyloarthritis

PsA

Obesity and Metabolic Syndrome



Prevention of Type 2 Diabetes through weight loss is crucial for patients with psoriasis¹⁰

Women with psoriasis are at increased risk of:11



Diabetes, independent of their BMI



Obesity

Cardiovascular Comorbidities



Psoriasis is an important risk factor for cardiometabolic disease^{10,13}

Early targeted screening for and close monitoring of classic cardiometabolic risk factors may be important when treating patients with psoriasis, particularly women^{10, 12, 13}

Higher prevalence of cardiovascular risk factors is observed in young women with psoriasis¹³



There is an increased risk for myocardial infarction in men and women with moderate-to-severe psoriasis...¹⁴

...whereas the risk for ischaemic stroke is elevated in women with moderate-to-severe disease¹⁴



Inflammatory Bowel Disease (IBD)



Some biologics can dampen down the symptoms of IBD^{1*}

Patients receiving some biologic treatments for psoriasis may:1



Experience fewer IBD symptoms



Be less likely to receive an IBD diagnosis

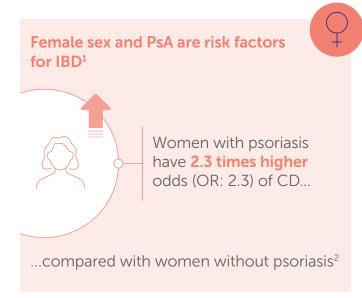
Mean time to Crohn's disease (CD) diagnosis was significantly longer for psoriasis patients compared with the general population...¹

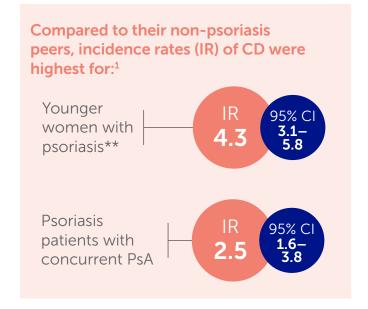




...and even longer for patients receiving systemic psoriasis treatment¹







Clinical Considerations





- ? Persistent diarrhoea
- ? Rectal bleeding/bloody stools
- ? Abdominal pain
- ? Unexplained weight loss

Refer to a Gastroenterologist where needed



*anti-TNFs and anti-12/23s; **Younger than 30 years.

Reviewed by: Prof Dominik Bettenworth, Gastroenterologist, Medical Faculty of the University of Münster, Münster, NRW, Germany.



? Fatique

Mental Health and Psychological Wellbeing



Psoriasis is associated with depression and anxiety, and this should be addressed with patients⁹



Psychological Distress

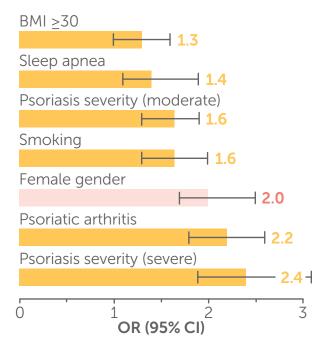
Anxiety and depression are more prevalent among women with psoriasis,⁷ who are also at increased risk for suicide ideation and attempts¹⁵

Sexual Dysfunction

Psoriasis can have a significant impact on quality of life (QoL) and sexuality, with **sexual dysfunction** reported in both patients (**95.3%**) and their partners (**40.9%**)³

Sleep Dysfunction

In patients with psoriasis, sleep difficulty was associated with:⁴



Chronic sleep dysfunction in patients with psoriasis can lead to adverse health outcomes, including cardiovascular disease, hypertension, obesity, Type 2 Diabetes Mellitus, depression, and all-cause mortality⁴

Dermatologists should screen patients with psoriatic disease to identify...



...and effectively guide disease management⁴





Body image and self-esteem issues, which affect women with psoriasis more than men¹⁶



Increased sexual dysfunction;¹⁶ clinical severity and impact on QoL were associated with sexual dysfunction in male partners of women with psoriasis, but not in female partners of men with psoriatic disease³

Clinical Considerations





Physicians should more intensively screen **female patients** with psoriasis to identify potentially **significant psychological distress**⁵⁻⁸

Assessing sleep (quantity and quality) can be a useful way to start a more in-depth conversation regarding overall mental wellbeing



Reviewed by: Dr Anca Mirsu-Paun, Psychologist, "Sf. Apostol Andrei" Hospital, Constanta, Romania.



Obesity and Metabolic Syndrome



Risk of obesity may be higher in psoriasis patients due to the proinflammatory state and release of mediators such as adipokines that contribute to inflammation¹¹

Weight loss interventions in patients lead to:11



Greater reduction in the severity of psoriasis compared with patients not receiving the intervention



Increase in drug efficacy in those on biologic treatment

Prevention of Type 2 Diabetes through weight loss is crucial for patients with psoriasis:10

Patients with severe psoriasis⁹ OR for diabetes **2.0**

95% CI 1.5-2.6

There is a higher prevalence of **metabolic syndrome** diagnostic criteria in patients with psoriasis compared with those without psoriasis:¹²

- Higher fasting glycaemia levels
- Higher blood pressure
- Lower high density lipoprotein (HDL)
- Higher hypertriglyceridemia
- Greater waist circumference



Women with metabolic syndrome have a higher chance of psoriasis compared with men¹⁷



Women with psoriasis are at increased risk of diabetes independently of their BMI¹¹

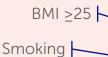
In psoriasis patients, female sex was associated with:5



Family history of diabetes

Clinical type, other than diffuse plaque psoriasis, and with joint involvement

While male sex was associated with:



Age at onset ≥20 years

Psoriasis area and severity index (PASI) ≥10



Clinical Considerations



Screen for metabolic risk factors regularly in your psoriasis patients, increasing regularity of screening with increasing psoriasis severity

It is important to **educate patients on the importance of a healthy lifestyle** due to the increased risk of obesity and diabetes in psoriasis patients

Screen for diabetes and metabolic syndrome in all women and not only in those who are overweight or obese



Reviewed by: Dr Leticia Fernández-Friera, Cardiologist, Co-founder Atriaclinic, Madrid; Cardiac Imaging Unit and Cardio-Mujer Unit, HM Hospitals, Spain.



Cardiovascular Comorbidities



Psoriasis, through systemic inflammation, is an important risk factor for cardiometabolic disease, atherogenesis and ischaemic cardiovascular events¹³

Early targeted screening for classic cardiometabolic risk factors may be important when treating patients with psoriasis, and in particular women:^{10, 13}



Hypercholesterolaemia



Hyperglycaemia



Hypertension

There is a need for close monitoring of cardiovascular risk factors in patients with psoriasis, who often only visit the dermatologist, to prevent a major cardiovascular event¹²

Biological therapy may affect atherosclerosis...¹³







...reducing the growth and development of atheromatous plaques¹³



Higher prevalence of cardiovascular risk factors is observed in women with psoriasis compared to men¹³



Compared with the general population, women with psoriasis have a higher risk of:10,13

- ! Self-reported hypercholesterolaemia
- ! Hospital-diagnosed hypertension
- ! Deep vein thrombosis
- ! Atherosclerotic cardiovascular disease

Cardiovascular risks are higher in young women* with psoriasis compared to men, and this is the inverse to what is observed in the general population¹³

Women with psoriasis have higher odds of hospitalisation (OR: 1.79), visiting outpatient clinics (OR: 2.12), and visiting their GP (OR: 3.82) compared to women without psoriasis²



There is an increased risk for myocardial infarction in men and women with moderate-to-severe psoriasis...¹⁴

...whereas the risk for **ischemic** stroke is elevated in women with moderate-to-severe psoriasis¹⁴





Clinical Considerations



Screen for cardiometabolic risk factors regularly in your psoriasis patients, increasing **regularity of screening** with increasing psoriasis severity and ensuring to screen female patients **as frequently as males**

It is important to **educate patients** on the **increased risk of cardiovascular events** in psoriasis patients, with special consideration in young women

Family history and lifestyle choices (smoking, alcohol, diet and exercise) should be considered



*Women aged 20-35 years.

Reviewed by: Dr Leticia Fernández-Friera, Cardiologist, Co-founder Atriaclinic, Madrid; Cardiac Imaging Unit and Cardio-Mujer Unit, HM Hospitals, Spain.



Psoriatic Arthritis (PsA)



Screening psoriasis patients for PsA at each visit is essential, as cutaneous disease precedes arthritis in the vast majority of patients⁹

20.5% of psoriasis patients develop PsA within 30 years, and...

...72.7% of patients experience skin lesions before arthritis⁹

Skin lesions preceded joint involvement in:9



of patients of patients of patients by by by

1 year 5 years >5 years



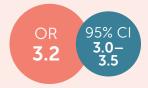
Psoriasis patients with a **higher body surface area** (BSA) are more likely to develop PsA (OR for 1% increase in BSA: 1.02)⁹

Importance of screening

Uncontrolled arthritis causes radiologic signs of joint damage in >50% of patients⁹



Joint involvement is more likely in women with psoriasis compared to those without:²



OR 95% CI 42.9-46.6

Axial spondyloarthritis

PsA

Women with endometriosis have a nearly 2-fold greater risk of PsA (HR: 1.77)¹⁸

Women with psoriasis and PsA...¹⁸



...have a higher mean BMI



...are less physically active



...are more likely to experience infertility



...are more likely to use over-the-counter analgesics such as aspirin and acetaminophen >2 days/week

...than patients without psoriasis

Clinical Considerations



Regular screening is important for early diagnosis and treatment of PsA, to prevent **progression of irreversible joint damage**

It is important to evaluate treatments that target both skin and joints

Nail psoriasis correlates with more severe disease and is an important predictor of PsA



Reviewed by: Dr Maria Sole Chimenti, Rheumatologist, Rheumatology Unit, University of Rome Tor Vergata, Italy.



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BMI: Body mass index; BSA: Body surface area; CD: Crohn's disease; CI: Confidence interval; GP: General Practitioner; HR: hazard ratio; HDL: High density lipoprotein; IBD: Inflammatory bowel disease; IL: Interleukin; IR: Incidence rate; OR: Odds ratio; PASI: Psoriasis Area and Severity Index; PsA: Psoriatic arthritis; QoL: Quality of Life; TNF: Tumour necrosis factor.

