

Psoriasis: a disease beyond the skin. Principles of care and the role of the General Practitioner

Ilaria Iannetti¹, Annunziata Dattola², Pier Luigi Bartoletti¹, Erica Firullo³, Alessandro Falcione¹, Massimo Sabatini¹, Claudia Di Ruscio¹

1. Centro Studi FIMMG Roma (Research Division of the Italian Federation of General Practitioner of Rome and Province)
2. Department of Dermatology, Policlinico Umberto I, Sapienza Università di Roma
3. General Practitioner

Received: June 14th, 2024

Accepted: July 24th, 2024

Published online: October 24th, 2024

© The Author(s) 2024

Corresponding author:

Massimo Sabatini

Via Andrea Baldi 30 - 00136 Roma

massimosabatini54@gmail.com

ABSTRACT

Psoriasis is a chronic, immune-mediated inflammatory dermatosis with a multifactorial etiology, affecting approximately 3% of the Italian population. This condition not only imposes a substantial burden on physical health but also significantly diminishes the personal and social quality of life of affected individuals. This study aims to assess the critical role of integrated management approaches in psoriasis, focusing specifically on the role of primary care physicians in coordinating multidisciplinary care and addressing comorbidities.

A comprehensive review of current therapeutic guidelines, classification systems, and available treatment strategies was conducted. This was supplemented with real-world clinical case studies. The study evaluated intervention approaches at both primary and secondary care levels, involving collaborations between general practitioners and specialists. Special emphasis was placed on the use of clinical assessment tools such as the Psoriasis Area and Severity Index (PASI) to categorize disease severity and guide therapeutic decisions.

Our findings underscore the effectiveness of a multidisciplinary and personalized approach in managing psoriasis, particularly in moderate-to-severe cases. The pivotal role of primary care physicians in the early diagnosis, ongoing monitoring, and coordination of care pathways was highlighted, leading to significant improvements in comorbidity management. The clinical cases presented illustrate how tailored therapeutic regimens, supported by close collaboration between general practitioners and dermatologists, can result in the effective resolution of psoriatic lesions and markedly enhance patients' quality of life.

This study reinforces the necessity of a comprehensive, integrated, and multidisciplinary approach in the management of psoriasis, with primary care physicians serving as crucial intermediaries between community-based and specialist care. Depending on disease severity, treatment response, and recurrence patterns, primary care physicians play a central role in directing patients to appropriate secondary care services. The integration of specialist dermatological care with ongoing community-based monitoring optimizes clinical outcomes and mitigates the overall disease burden. We advocate for the establishment of clinical networks that facilitate seamless communication between different levels of care, ensuring holistic and targeted management of both psoriasis and its associated comorbidities.

Keywords: Psoriasis, primary care physician, multidisciplinary care, integrated therapy, quality of life, comorbidities.

INTRODUCTION

In the 2014 the WHO Resolution emphasized the importance of psoriasis. The condition affects approximately 3% of the population in Italy. Psoriasis is a chronic and multifactorial inflammatory skin disorder that can manifest in extensive and severe forms. Its specific characteristics, manifestations, and chronic nature significantly impact not only the physical but also the personal, social, and relational aspects of many patients, severely altering their quality of life, with negative consequences that can be significant or even disabling.^{1,2}

ETIOPATHOGENESIS

An active discussion persists regarding the exact pathogenesis of psoriasis. The pathology is multifactorial, involving genetic, immunological, and environmental factors. Psoriasis can be considered an autosomal dominant transmission dermatosis, whose development is probably linked to an alteration of the immune system in response to an antigenic stimulus. Based on this genetic basis, various environmental factors, including physical trauma, pharmacological reactivity, infections, and modifiable variables such as psychological stress, obesity, smoking, and alcohol, have been correlated with a predisposition to the development of psoriasis and exacerbation of the disease.^{3,4}

COMORBIDITIES

Patients with psoriasis, particularly those with moderate to severe cases, have an increased risk of developing other serious comorbidities. The systemic inflammation is obviously a predisposing factor, and patients may develop other pathologies such as psoriatic arthritis, metabolic syndrome, ocular pathologies, cardiovascular diseases, Crohn's disease, as well as psychiatric disorders such as anxiety and depression.⁵

CLINICAL FORMS

The typical psoriatic lesion (plaque psoriasis or vulgar psoriasis) appears as an erythematous patch of variable color from pale pink to reddish-brown, with regular and clear margins

covered with white-silvery lamellar scales. The lesions, generally not painful, can sometimes be itchy. They appear mainly on the extensor surfaces of the limbs, elbows, knees, sacroiliac region, and even involving other regions, especially the scalp. Dystrophic nail alterations are observed in over one-third of people with psoriasis.

The typical feature of psoriasis is the *Koebner phenomenon*, whereby psoriatic plaques can appear following a traumatic event, surgical scar or burn. The morphology of the patches varies: they can be round, oval, polygonal, coin-shaped, or serpiginous. The lesions are generally multiple and symmetrical, and can affect all skin areas, although the most affected areas are the knees, elbows, sacral region, and scalp.

We distinguish the forms of psoriasis based on the type of lesion or the involved body area. In the first group (based on the type of lesion), we have: plaque or vulgar psoriasis, guttate psoriasis, nummular psoriasis, pustular psoriasis. In the second group (based on the involved body area), we have: universal psoriasis, erythrodermic psoriasis, inverse psoriasis, nail psoriasis, oral mucosa psoriasis, palmoplantar psoriasis.⁶

DIAGNOSIS AND CLASSIFICATION

The diagnosis of psoriasis typically involves a combination of medical history, physical examination, and sometimes additional tests, such as a skin biopsy.¹

The severity of psoriasis is currently evaluated using various clinical metric scales. The most frequently adopted measure to define the severity of skin involvement is the PASI (Psoriasis Area and Severity Index).¹ It is a numerical index that assigns a value to the extent of psoriasis and other clinical signs, scoring the affected areas of the body and considering some characteristics of the lesions: the extent of the lesions, the thickening of the plaques, the intensity of erythema, and scaling. A score ranging from 0 to 72 is assigned, and the body is divided into areas (face and scalp, trunk, upper limbs, lower limbs), thus obtaining three degrees of psoriasis:

- mild psoriasis: PASI < 10,
- moderate psoriasis: PASI 10-20,
- severe psoriasis: PASI > 20.

THERAPY

The treatment of psoriasis is tailored according to the severity of the disease. Topical therapy is recommended for mild psoriasis with PASI < 10, especially in stable forms with a limited number of lesions. Available formulations include corticosteroids, salicylic acid (a commonly used and effective keratolytic), calcipotriol, and tecalcitol (two vitamin D analogues that inhibit the proliferation of human keratinocytes and induce their differentiation). Other treatments include phototherapy (ultraviolet B light or PUVA: psoralen and ultraviolet A). Creamy excipients serve to moisturize the skin, thanks to their water and glycol content (such as allantoin, urea, animal, vegetable and mineral fats, lanolin, glycerolates, and hydrocarbons). Dithranol and tar are no longer used due to possible local irritation and potential carcinogenicity of the tar. Systemic therapy is recommended for moderate and severe forms, and includes methotrexate, cyclosporine, fumaric acid, acitretin, and new biological drugs.^{7,8}

HEALTHCARE MANAGEMENT OF PSORIASIS IN ITALY

In Italy individuals with psoriasis, classified as having a chronic condition, are entitled to specific services provided free of charge upon prescription by their General Practitioner, who includes the exemption code on the National Health System prescription form (Law 326/03). According to the Official Gazette n. 226 of September 25, 1999, exemptions from health charges are granted for forms of psoriasis including psoriatic arthritis, pustular, and erythrodermic psoriasis. Obtaining exemption involves applying to the local Health Authority (exemption code 045), granting access to dermatological visits with specialists, including nursing visits, specific diagnostic tests such as histology and dermatoscopy, prescribed drugs and therapies, and hospitalization for therapeutic treatment. Additionally, the law exempts individuals from rehabilitation ticket payments and aids/prostheses purchases. Medicines used for psoriasis treatment are also exempt from payment. Psoriasis is recognized as a social disease by the Italian State, allowing individuals to contribute to pensions on more favorable terms than ordinary legislation,

considering the disability resulting from the condition. These services and recognitions aim to ease access to diagnosis, treatment, and social integration, thereby reducing distress and marginalization commonly associated with psoriasis.⁹

CLINICAL CARE PATHWAY FOR PATIENTS WITH PSORIASIS

Traditional management of psoriasis starts with assessing its severity. Therapeutic strategies should also consider factors like psoriatic arthritis and other comorbidities, promoting a multidisciplinary approach to minimize the disease burden.

The Clinical Care Pathway for psoriasis patients consists of two phases:

- territorial management by General Practitioners or Dermatology Specialists,¹
- hospital management at dedicated outpatient clinics (Reference Hubs).

General Practitioners assess psoriasis severity based on clinical conditions and may use an algorithm involving the PASI (severity of the disease), BSA (percentage of body surface area), and DLQI (interference with the patient's quality of life).

Treatment is determined accordingly:

- mild psoriasis (<10% body surface, minimal impact on quality of life) without comorbidities can be managed by the General Practitioner;
- moderate/severe psoriasis without comorbidities may require referral to specialist dermatological clinics, possibly to Reference Hub facilities. The General Practitioner may refer patients with mild psoriasis to a specialist dermatology clinic if topical treatment fails to achieve significant improvement. Patients with moderate/severe psoriasis or systemic symptoms are directed to a Reference Hub facility.

The General Practitioner plays a crucial role in patient care, providing education, prevention, diagnosis, and treatment. Psoriasis requires a multidisciplinary approach, and General Practitioners can improve management by educating patients about their treatment, monitoring compliance and

quality of life, and addressing any difficulties or concerns. A treatment algorithm proposed by the University 'Sapienza' of Rome integrates biological therapy with comorbidity management, involving hospital Hubs, General Practitioners, and local dermatologists with the presence of a digital platform at the Hub Center. Given the high number of patients referred to Hub Centers, it becomes necessary to share the management of all patients with the local dermatologist and/or the General Practitioner with the aim of improving performance and optimizing patient care. It is therefore necessary to generate a network composed of General Practitioners, non-hospital dermatologists, and other specialist figures (rheumatologist, gastroenterologist, ophthalmologist, cardiologist, oncologist). Furthermore, the prescription Center remains a reference point for periodic checks, especially in case of new comorbidities, recurrence of the disease, or therapeutic failure.^{1,10}

CLINICAL CASES

Case 1. General Practitioner management

82-year-old woman in good health, former teacher; she presents small erythematous-desquamation lesions on the lower limbs (PASI 4) (**Fig. 1**).



Fig. 1. Clinical presentation

Based on the clinical picture, it is decided to manage with topical administration of steroids. In **Figure 2** the lesions after the beginning of the therapy.

Resolution after 1 month of therapy (PASI 0) (**Fig. 3**).



Fig. 2. After beginning therapy

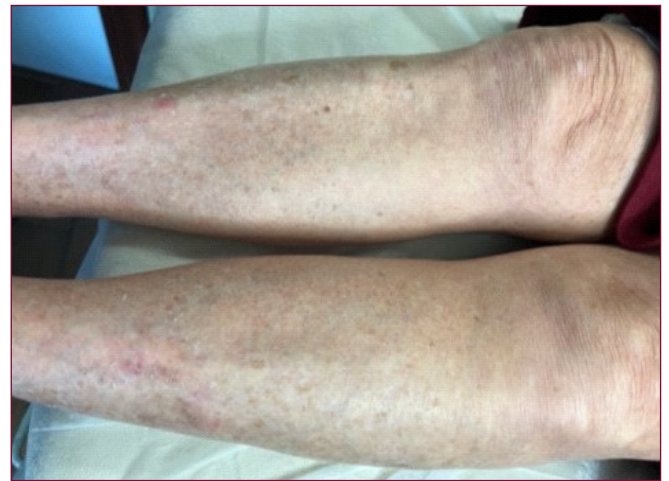


Fig. 3. Resolution after therapy

Case 2. Management shared with specialized Center

30-year-old woman, weight 60 kg, smokes 2 packs of cigarettes/day, drinks alcohol 2 glasses/day; onset of psoriasis: 21 years old; no family history; no previous treatments; no comorbidities; appearance of erythematous-desquamation lesions localized on the palms of the hands bilaterally (PASI 4 following a road accident) (**Fig. 4**).

It is decided to start topical therapy with calcipotriol/betamethasone mousse, once a day in the evening, for one month. The patient is re-evaluated after 1 month of the therapy and she presents resolution of the lesions (PASI 0) (**Fig. 5**).



Fig. 4. Clinical presentation



Fig. 5. Resolution after 1 month of therapy

After the follow-up visit, the patient discontinues therapy. She presents to our observation after 3 months from the discontinuation of therapy with the presence of new itchy and erythematous-desquamation lesions localized on the feet (PASI 4) (**Fig. 6**).



Fig. 6. Three months after discontinuation of therapy

Based on the clinical picture, we decide to refer the patient to the specialized psoriasis Center. The patient is evaluated to start therapy with biological drugs, and colleagues in dermatology start therapy with an anti-IL23, risankizumab. The patient returns after 12 weeks of therapy with resolution of the lesions (**Fig. 7**).¹



Fig. 7. Resolution after 12 weeks of therapy

CONCLUSIONS

Psoriasis presents as a pathology in which the organic and psychological aspects are strongly connected, and numerous studies underline the need for an 'integrated' approach to the pathology, in which the care of the skin surface damaged by severe psoriasis goes hand-in-hand with psychological support for the patient and his/her family. The General Practitioner represents an indispensable link between the National Health Service and the citizen: he/she visits the patient and, based on the clinical conditions, establishes the eventual diagnosis of psoriasis and defines its severity, activating and orienting, where necessary, any specialist investigations. Psoriasis, a chronic, multidistrict pathology, related to risk factors and comorbidities, has all the characteristics of a pathology that requires a multidisciplinary approach, which concretely realizes the holistic dimension of General Medicine, with the sole aim of improving performance and optimizing patient care.

REFERENCES

1. Bianchi L, Dattola A. Farmaci biologici e piccole molecole nella Psoriasi. Testo Atlante Ed. Minerva Medica. 2021
2. Dauden E, Blasco AJ, Bonanad C et al. Position statement for the management of comorbidities in psoriasis. *J Eur Acad Dermatol Venereol.* 2018;32:2058-2073
3. Raharja A, Mahil SK, Barker JN. Psoriasis: a brief overview. *Clin Med (Lond).* 2021;21:170-173
4. Griffiths CE, Armstrong AW, Gudjonsson JE, Barker JN. Psoriasis. *Lancet.* 2021;397:1301-1315
5. Thatiparthi A, Martin A, Liu J et al. Biologic treatment algorithms for moderate-to-severe psoriasis with comorbid conditions and special populations: a review. *Am J Clin Dermatol.* 2021;22:425-442
6. Bianchi L, Caldarola G, Campione E et al. A multidisciplinary approach for patients with moderate-to-severe psoriasis: an advisable network of management. *Ital J Dermatol Venerol.* 2023 Jun;158(3):262-263
7. Girolomoni G, Altomare G, Ayala F et al. Differential management of biologic drugs in mild-to-severe psoriasis patients: An Italian Delphi consensus expert panel. *J Dermatolog Treat.* 2015;26:128-133
8. Jacobs A, Rosumeck S, Nast A. Systematic review on the maintenance of response during systemic antipsoriatic therapy. *Br J Dermatol.* 2015;173:910-921
9. Gisondi P, Cazzaniga S, Chimenti S et al.; Psocare Study Group. Latent tuberculosis infection in patients with chronic plaque psoriasis: evidence from the Italian Psocare Registry. *Br J Dermatol.* 2015;172:1613-1620
10. Lubrano E, Cantini F, Costanzo A et al. Measuring psoriatic disease in clinical practice. An expert opinion position paper. *Autoimmun Rev.* 2015;14:864-874

DISCLOSURES

Funding: The authors received no funding for this manuscript

Conflicts of interests: The authors declares that they have no conflict of interests.

© The Author(s). This article is published by Ma.CRO Lifescience Srl and licensed under Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0). Commercial use is not permitted and is subject to Publisher's permissions. Full information is available at www.medicalacademyjournal.com