

**A case report- Ostraceous psoriasis**

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**conflicts of interest:** Nil

**Abstract:**

Ostraceous psoriasis (op) is characterized by severe hyperkeratotic lesions that resemble an oyster shell. This kind of psoriasis is relatively uncommon and is frequently accompanied with psoriatic arthritis (pa). <sup>1</sup>a 24-year-old male presented with hyperkeratotic lesions resembling an oyster shell on his bilateral upper and lower limbs and trunk. Lesions were seen all throughout the body along with swelling on the joints of both fingers, knee joints, and ankle. The diagnosis of Ostraceous psoriasis was validated by histopathological investigation. The classification criteria for psoriatic arthritis (Caspar) were used to make the diagnosis of pa. A high potency corticosteroid coupled with an emollient produced good skin improvement with little adverse effects.<sup>1</sup> furthermore, cyclosporine was administered, which is an excellent choice of systemic therapy for Ostraceous psoriasis.

**Keywords:** Ostraceous, Psoriatic Arthritis, Hyperkeratotic.

**Introduction**

Ostraceous psoriasis is a rare kind of plaque psoriasis. It develops severe oval-shaped or oyster-like skin lesions that are exceptionally thick and rigid. Ostraceous psoriasis can coexist with psoriatic arthritis (PSA), a kind of arthritis most commonly linked with severe psoriasis. Ostraceous psoriasis is distinguished by excessively thick and many plaques that may expand in size. It can affect the face, scalp, chest, back, arms, and hands.

Ostraceous psoriasis is frequently related with psa, a condition characterized by swelling and soreness in the toes, fingers, and other minor joints, morning stiffness, heel discomfort, swelling or pain in the heel (around the Achilles tendon). Ostraceous psoriasis is considered a chronic disorder that requires lifelong care and proper

treatment of flare-ups. Due to the rarity of this form of psoriasis, we present it here.

### Case report

A 24-year young male presented to us in dermatology OPD with chief complaints of:

Multiple elevated lesions with yellowish scaling over bilateral upper limbs, lower limbs & trunk for 2 months.

H/o similar lesion with exacerbations and remissions on trunk for 5 years

C/o arthralgia for which patient was getting treatment.

On examination multiple hyperkeratotic large plaques with adherent yellowish scaling covering over 80% surface area of bilateral upper limbs, lower limbs & trunk. All nails showed hyperkeratosis, pitting and onycholysis. A detailed medical history, physical examination and blood investigations did not reveal any comorbidities. Skin biopsy was advised.



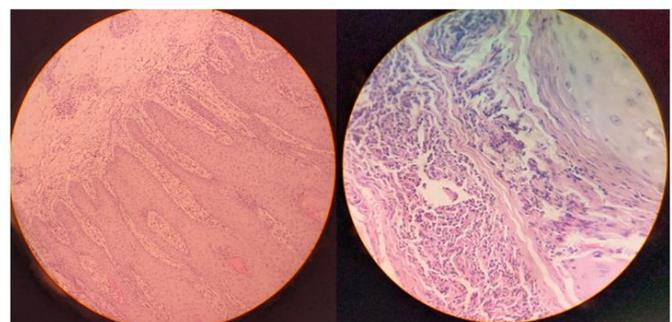
Nails showing hyperkeratosis, pitting and onycholysis.



Pih due to healed lesions present on trunk after treatment.



Multiple hyperkeratotic large plaques with adherent yellowish scaling covering over 80% surface area of bilateral lower limbs.



Biopsy of the skin psoriasis was done. Histopathology showed epidermal hyperplasia with elongation of rete ridges, parakeratosis with neutrophil infiltration in the stratum corneum, dilatation of blood vessels in the dermis & Munro's micro-abscess.

Following pertinent studies, the patient was treated with cyclosporine (50mg bd) and low dose methotrexate

(7.5mg) pulse treatment. Local treatment included topical steroids, emollients, and keratolytic agents. The lesions are gradually but noticeably improving. The patient was counselled about the disease's chronic, relapsing nature and the importance of regular follow-up.

### **Discussion**

Psoriasis is a chronic inflammatory condition that affects the skin and joints. It is caused by genetically determined immune alterations and can be triggered by a variety of environmental triggers. In terms of clinical condition, the disease can manifest itself in a variety of ways, with unique designations based on the pattern of lesions or anatomical location. There are various names for hyperkeratotic lesions in the literature, including elephantine, rupioid, Ostraceous, and pseudohorny.<sup>2</sup>

Deutsch coined the term Ostraceous psoriasis (op) as 'atypical psoriasis' in 1898. The lesions in this type of psoriasis are exuberant horny plaques with a concave inner face bordered by a hyperkeratotic ring and an external surface coated with adherent and thick scales like an oyster shell.<sup>3</sup> The patient in this case had extensive erythematous plaques with hyperkeratotic scales that resembled an oyster shell, which supported the diagnosis of ostraceous psoriasis.

The histopathological findings of ostraceous psoriasis are similar to those of psoriasis vulgaris. These parallels include parakeratosis with neutrophil infiltration in the stratum corneum, Munro's microabscess, epidermal hyperplasia with rete ridge extension, hypogranulosis, and cutaneous blood vessel dilatation.<sup>3</sup> This patient's histological examination findings validated the diagnosis of ostraceous psoriasis. Psoriatic arthritis is related with ostraceous psoriasis, which is resistant to topical therapies. Psoriatic arthritis symptoms included joint

pain, stiffness, edema, soreness, and limited joint movement.

The Caspar criteria are as follows: established inflammatory articular disease with at least 3 points from the following features: current psoriasis (2 points), personal history of psoriasis (1 point), family history of psoriasis (1 point), current dactylitis or history of dactylitis recorded by a rheumatologist (1 point), juxta-articular new bone formation (1 point), negative rheumatoid factor (1 point), typical psoriatic nail dystrophy with onycholysis, pitting, and hyperkeratosis (1 point).<sup>4</sup>

The presence of five points of symptom based on Caspar criteria, including current psoriasis (2 points), current dactylitis (1 point), negative rheumatoid factor (1 point), and typical psoriatic nail dystrophy (1 point), led to the diagnosis of pa in this case. Cyclosporine is the first-line therapy for moderate-to-severe psoriasis, pustules psoriasis, erythroderma, and pa.

### **Conclusion**

Ostraceous psoriasis, like psoriasis vulgaris, requires continuous medication and monitoring due to its autoimmune nature. Failure to follow up on appointments and obtain regular therapy might lead to limb anomalies that interfere with the patient's daily activities.

### **Declaration of patient**

In their statement of patient consent, the authors state that they have the necessary patient permission documents on file. The patient has indicated in the form that he is fine with images and other clinical data being published in the publication. He understands that, while every attempt will be made to conceal his identity and that his name and initials will not be published, anonymity cannot be guaranteed.

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