Review Article

Facial Psoriasis: Hard to hide a serious psoriasis

Farhana Wahab[1],Rehnuma Nasim[2], Md. Shahidullah Sikder[3]

1. Dr. Farhana Wahab, Junior consultant, Sarkari Karmachari Hospital, Dhaka, Bangladesh.
2. Dr. Rehnuma Nasim, Registrar, National Institute of Cancer Research and Hospital,Dhaka, Bangladesh.
3. Prof. Dr.Md. Shahidullah Sikder, Professor, Dept. of Dermatology and Venereology, Bangabandhu Sheikh Mujib Medical University (BSMMUI), Dhaka, Bangladesh.

Abstract:

Facial psoriasis is one of the most obvious presentations of psoriasis, associated with and directly contributes to a greater functional, psychologicaland aesthetic burden of life in psoriatic patients. Facial involvement may be a marker of severe psoriasis. The face is often involved for patients with long duration or early onset of disease; with the nail or joint involvement; and those requiring more extensive treatments. Common evaluation tools are Psoriasis Area and Severity Index (PASI) and Dermatology Life Quality Index (DLQI). The treatment of facial psoriasis is considered challenging and is therefore subjected to be assessed on an individual basis according to the severity of the disease. In this review, we have highlighted the different presentations of facial psoriasis, emphasized the debilitating nature and also explored the targeted therapies for Facial PsO (FP).

Keywords: Face, Psoriasis.

Introduction:

Psoriasis is a chronic, inflammatory, immune-mediated skin disorder that affects 0–6.6% of the world's population.[1-2] Lesions of psoriasis are commonly seen on extensor surfaces, including the elbows and knees, as well as on the scalp, the umbilicus, and the lumbar region.[2-3] The presentation of psoriasis may be localized to one or more of these regions or may be generalized. Less frequently, lesions of psoriasis are seen on the face, palms, soles, genital area and intertriginous regions.[4] Face is relatively spared in adults, however, in infants lesions tend to develop frequently on the face and flexures.[5]

Some studies indicate that facial involvement in adults is much more common than it was previously considered, besides being a predictor of severity in psoriasis, since the pattern of facial lesions influences the behaviour/progression of the disease.[6-7] Facial psoriasis may cause embarrassment, emotional distress and negative psychosocial impact, as well as pruritus-like symptoms, because of its occurrence in a high-visibility region. All these activities together in a negative way, influence patients' quality of life.[8]

Facial psoriasis results in psychosocial debilitationas well as physical challenges, including impaired vision, hearing, and chewing. Studies evaluating the quality of life indices showed a greater negative impact in patients diagnosed with facial psoriasis than in those diagnosed with plaque psoriasis of the body[9]. In addition to those with facial involvement, high-risk groups include young patients and patients with severe diseases.[10] Although both genders are at risk for suicidal ideation and depression, women present with greater distress about psoriasis.[11]

Growing observation on the impaired quality of life associated with facial disfigurement and psychological impairment has currently evolved our attention to reviewing Facial psoriasis.

Corresponding author

Dr. Farhana Wahab, Junior consultant, Sarkari Karmachari Hospital, Dhaka, Bangladesh. email: farhana.wahab80@gmail.com contact: 88-01535438404
Received: 21 May 2022 Accepted: 04 June 2022 Available Online: 01 July 2022

Cite this Article:
Wahab F, Nasim R, Sikder MS . Facial Psoriasis: Hard to hide a serious psoriasis . J Ban Acad Dermatol. 2022; 02 (02): 96-100

Available at: www.jbadbd.com
An official publication of Bangladesh Academy of Dermatology (B.A.D.)

Epidemiology:

The prevalence of facial psoriasis doesn't vary widely in different regions of the world. Iranian patients, as well as English ones, presented a very high frequency of facial involvement (55.0%, and 58.7%, respectively).In Koreans, the prevalence of facial lesions was found to be 67.7%.[6-7] In our country, still there is no data regarding such information.

With reported data, approximately 50% of psoriasis patients attending psoriasis clinics have facial involvement.7,[14-15] Facial psoriasis is more common in younger individuals (30- to 35- year- old group) and those with a higher mean Psoriasis Area Severity Index (PASI).[15] There is no predominant gender differences.[7,14-15] However, a [1.6–2.5] times greater prevalence of facial involvement in males was found in two studies,this feature was somehow related to the younger population.[7,14] As to the age of onset, facial psoriasis occurred a little later(after 5 years)than in other areas[7].

Etiology:

The exact cause of facial involvement is unknown. As to external factors, seasonal exacerbation and the Koebner response have been suggested as evidence of severe facial psoriasis. The Koebner or isomorphic response is associated with the early onset of disease and multiple previous therapies.[16-17] A high incidence of facial involvement in photosensitive psoriasis also suggests that the Koebner response may be a pathway to disease severity.[18] Recent studies showed that a family history of psoriasis, alcohol, smoking, diabetes, hypertension, and dyslipidemia was associated with facial involvement, respectively.[19] Bernhard and Person reported that systemic therapy withdrawal may be another cause of facial psoriasis because it is associated with relapse or rebound phenomena in which the disease can be more severe than it was before treatment.[18] However, another study revealed that patients with BMI ≥ 25 presented not only more psoriatic arthritis but also more facial involvement when compared with those with BMI <25 (18.3% vs. 8.4%) (P = 0.02).[20]

Clinical manifestation:

Facial psoriasis is a chronic skin condition in which there are one or more persistent, thickened, red and dry patches on the face. Eyebrows, skin between the nose and upper lip, upper forehead and hairline are the commonly affected area. Scales usually cover the eyelashes, the eyelid's edges get red and crusty. Eyes become dry, inflamed, and irritated.

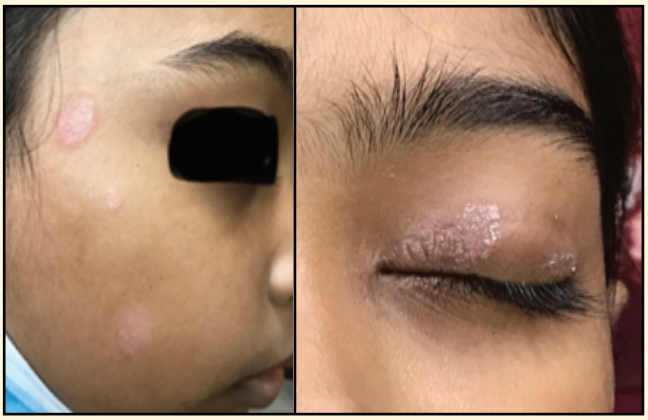

Fig-1: Facial psoriasis on eyelid and lateral face

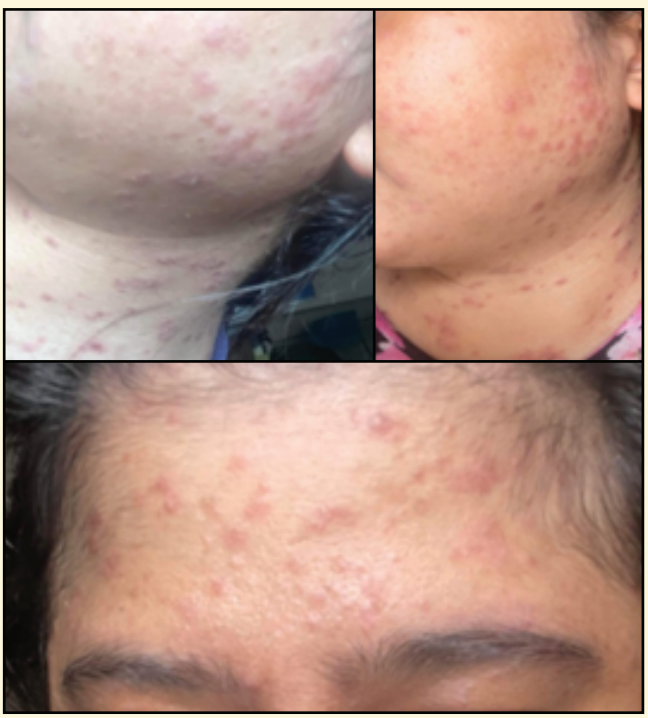

Fig-2: Facial psoriasis on forehead and chick

Psoriasis does not affect the inner ear usually, the ear canal may be blocked by scales.The facial lesion also may be present as a white and grayish lesion on the gums or tongue, inside the cheek, nose, and lip.[21] Clinically facial involvement of psoriasis is classified into 4 subtypes-

1.**Centrofacial:** Centro facial is the most severe form and is characterized by lesions localized to the seborrheic areas.[4,22]

2.**Peripherofacial:** lesions confined within the hairline only.[22]

Fig-3: shows different subtypes of facial psoriasis

3.**Mixed.type.:** the most common subtype and consists of classic plaque psoriasis morphology with well-defined lesions.[4,22]

4.**Confluent or Mask like** Rare and newer type. Extensive confluent involvement of the eyelids and upper lip, locations not characteristic of mixed type, and there isno history or evidence of coalescence at the hairline or central face involvement. The plate-like appearance of the scale is not typically seen in facial psoriasis and is more similar to that sometimes seen on the trunk and limbs.[23]

Assessment of facial psoriasis[24]

Grade 1. A few patches but no scale
Grade 2. A few red patches with scale
Grade 3. Thick plaque with scale involving <25% of face
Grade 4. Thick plaques with scale involving <50% >25 % of face
Grade 5. Thick plaques with scale involving >50% of face

Quantification method:

The severity of Facial psoriasis is accessed by using PASI. PASI ≥ 10 isclassified as having moderate/severe psoriasis. Whereas if PASI <10, the patient is told to have mild disease. The impact of Facial psoriasis on subjects' quality of life is done by the DLQI. DLQI results range from 0 to 30 points and can be interpreted as follows: 2–5 (little impact on the patient's quality of life), 6–10 (moderate impact), 11–20 (very large impact), and 21–30 (extremely large impact).[18]

Previous data demonstrated that PASI scores were significantly higher (14) in patients with facial involvement, with the absolute difference between the groups being 8.0 points, and consequently should be accepted as clinically relevant (greater than 4.5 points). Mean DLQI scores were found to be 7.5 points (with facial lesions) and 4.7 points (without facial lesions).[19]

Hence, it can be inferred that there is an association between the presence of lesions on the face with the severity of psoriasis evaluated by PASI and also with themoderate impact on quality of life measured by DLQI.

Diagnostic tool:

The diagnosis of psoriasis is mainly clinical. Though skin biopsy for histopathology, an invasive procedure, is the confirmatory test, thus delaying the diagnosis and correct treatment[25] Considering histopathological findings, only Munro-microabscesses and Spongiform pustules of Kogojare truly diagnostic,[26]

For facial involvement, the cosmetic concern isimportant. Therefore, dermoscopy as a noninvasive diagnostic tool can help to diagnose without the need for a biopsy[27]. Light red background with regularly distributed dotted vessels and white diffuse scales under dermoscopyis reported to help in the diagnosis of psoriasis with 80%–88% specificity and 84.9%–87.8% sensitivity as studied in Caucasian patients.[27-28] Recent dermoscopic data reveals that white scale (75%), dull red background (72.7%), diffuse distribution of red dots and globules (75.9%), dominated twisted loops of vessels, and less presence of bushy vessels (35%).[29]

Psychological impact:

Facial psoriasis is readily visible and imposes an extra psychological burden of fear for social judgment which intends to feel ashamed, isolated and depressed. Facial psoriasis may be cause of challenges in relationship, intimacy and occupation which may leads even to suicidal ideation. [30]

Treatment:

Psoriasis on the face is difficult to treat as the facial skin is thinner and may become more sensitive to treatment.

General measures:

Stress is a possible trigger for psoriasis and can be relieved by exercise, medication and making time to relax. The skin should be treated gently with the

avoidance of scratching. Sunscreen is to be applied daily to avoid sunburn that aggravates psoriasis. Lotion, cream, moisturizer and cold compression on psoriatic lesions make the skin feel better, cease itching, scaling and dryness.[22]

Topical therapy:

Therapy for facial psoriasis includes low potency corticosteroids like hydrocortisone 1% cream, rinsing with saline solution, calcineurin inhibitors, retinoids, such as tazarotene, vitamin D analogs, coal tar and salicylic acid in shampoo form, UVB phototherapy and excimer laser. Crisaborole 2% ointment is a safe and effective nonsteroidal treatment option for facial psoriasis.[31]

Systemic therapy:

Apremilast, cyclosporine, low-dose retinoid, and methotrexate are commonly used when topical treatment fails. More recently, biologic therapies have become the mainstay for the treatment of moderate to severe plaque psoriasis, despite their high cost and need for subcutaneous administration.[32]

A recent study on 1100 patients with facial psoriasis showed that ixekizumab, an interleukin 17A antagonist, is an effective treatment alternative to traditional therapies.[32] Adalimumab is also efficacious in the treatment of facial psoriasis, with superior responses when compared to methotrexate or placebo.[4] The selection of adalimumab as biologic therapy was based on the patient's insurance coverage in this case. The use of biologic therapies may provide both a physical and a psychosocial benefit through the improvement of facial psoriasis.

Conclusion:

Although some studies indicate that Facial psoriasis could be a predictor of psoriasis severity, facial lesions are neglected in most descriptions in current literature. The increased risk of depression, anxiety, and suicide among patients diagnosed with psoriasis is often not fully valued by physicians; dermatologists should be accomplishedof markers of increased risk, including the presence of facial lesions.

Reference:

1. Danielsen K, Olsen AO, Wilsgaard T, Furberg A-S. Is the prevalence of psoriasis increasing? A 30-year follow-up of a population-based cohort. Br J Dermatol2013; 168: 1303–1310.
2. Schon€ MP, Boehncke WH. Psoriasis. N Engl J Med 2005; 352: 1899–1912.
3. Casciano F, Pigatto PD, Secchiero P, Gambari R, Reali E. T cell hierarchy in the pathogenesis of psoriasis and associated cardiovascular comorbidities. Front Immunol. 2018;9:1390.
4. Merola JF, Qureshi A, Husni ME. Underdiagnosed and undertreated psoriasis: nuances of treating psoriasis affecting the scalp, face, intertriginous areas, genitals, hands, feet, and nails. DermatolTher. 2018;31(3):e12589.
5. Bronckers IM, Paller AS, van Geel MJ, van de Kerkhof PCM, Seyger MMB. Psoriasis in children and adolescents: diagnosis, management and comorbidities. Paediatr Drugs 2015; 17: 373–384.
6. Keshavarz E, Roknsharifi S, Shirali Mohammadpour R, Roknsharifi M. Clinical features and severity of psoriasis: a comparison of facial and nonfacial involvement in Iran. Arch Iran Med 2013; 16: 25– 28.
7. Park JY, Rim JH, Choe YB, Youn JI. Facial psoriasis: comparison of patients with and without facial involvement. J Am Acad Dermatol. 2004; 50: 582–584.
8. Syed Nong Chek SR, Robinson S, Mohd Affandi A, Baharum N. Clinical characteristics of patients with facial psoriasis in Malaysia. Int J Dermatol. 2016;55(10):1092-1095.
9. Beattie PE, Lewis-Jones MS. A comparative study of impairment of quality of life in children with skin disease and children with other chronic childhood diseases. Br J Dermatol. 2006;155(1):1145-1151.
10. Kwan Z, Bong YB, Tan LL, Lim SX, Yong ASW et al. Determinants of quality of life and psychological status in adults with psoriasis.Arch Dermatol Res. 2018;310(5):443-451.
11. Nicholas MN, Gooderham M. Psoriasis, depression, and suicidality. Skin TherLett. 2017;22(3):1-4.
12. Van de Kerkholf PCM. Clinical features. In: van de Kerkholf PCM, ed. Textbook of Psoriasis, 2nd edn. Massachusetts: Blackwell Publishing, 2003: 3–13.
13. Christophers E. Psoriasis – epidemiology and clinical spectrum. ClinExpDermatol2001; 26: 314–320.
14. Rassai S, Feily A, Sina N, Hajikaramian A. Facial involvement in Iranian psoriatic patients and its relation to severity of the disease. J EurAcadDermatolVenereol2010; 24: 1488–1489.
15. Canpolat F, Cemil BC, EskiogluF, et al. Is facial involvement a sign of severe psoriasis? Eur J Dermatol2008; 18: 169–7.
16. Melski JE, Bernhard JD, Stem RS. The Koebner (isomorphic) response in psoriasis: association with early age of onset and multiple previous therapies.

Arch Dermatol 1983;12:655-9.
17. Baker AJ, Wilkinson DS. Psoriasis. In: Rook AJ, Wilkinson DS, Ebling FJ, editors. Textbook of dermatology. Oxford: Blackwell Scientific Publications; 1979. p. 1315.
18. Bernhard JD. Significance of facial involvement in photosensitive psoriasis. Photodermatol 1987;4:221-4.
19. Passos AN, de A. Rêgo VRP, Duarte GV, Santos e Miranda RC, de O. Rocha et al. Facial involvement and the severity of psoriasis. Int J Dermatol. 2019;58: 1300-1304.
20. Duarte GV, Follador I, Cavalheiro CMA, Silva TS, Oliveira MFSP Psoriasis and obesity: literature review and recommendations for management. An Bras Dermatol. 2010;85(3):355-60.
21. Annie Stuart. Facial psoriasis. https://www.webmd.com/skin-problems-and-treatments/psoriasis/-facial-psoriasis
22. Van de Kerkhof PC, Murphy GM, Austad J, Ljungberg A, Cambazard F. Psoriasis of the face and flexures. J Dermatolog Treat. 2007;18(6): 351-360.
23. Zachary CMB, Belzer A, Fackler NP, Shiu J, Smith J, et al. Facial psoriasis in a mask-like distribution. JAAD Case Rep. 2020 Nov 24;7:128-130.
24. Harrison PV, Walker GB. Facial psoriasis. Clinical and Experimental Dermatology (1985) 10, 41-44.
25. Korfitis C, Gregoriou S, Antoniou C, Katsambas AD, Rigopoulos D. Skin biopsy in the context of dermatological diagnosis: a retrospective cohort study. Dermatol Res Pract. 2014;2014:734906.
26. Raghuveer C, Shivanand DR, Rajashekar N. Clinico-histopathological Study of Psoriasis. Int J Sci Stud 2015;3(7):176-179.
27. Lallas A, Kyrgidis A, Tzellos TG, Z Apalla, E Karakyriou et al. Accuracy of dermoscopic criteria for the diagnosis of psoriasis, dermatitis, lichen planus and pityriasisrosea. Br J Dermatol. 2012;166(6):1198–1205.
28. Pan Y, Chamberlain AJ, Bailey M, Chong AH, Haskett M et al. Dermatoscopy aids in the diagnosis of the solitary red scaly patch or plaque: features distinguishing superficial basal cell carcinoma, intraepidermal carcinoma, and psoriasis. J Am Acad-Dermatol. 2008;59(2):268–274.
29. Golińska, J., Sar-Pomian, M., & Rudnicka, L. (2020). Dermoscopy of plaque psoriasis differs with plaque location, its duration, and patient's sex. Skin Research and Technology. Skin Res Technol. 2020;00:1–10.
30. Alpsoy E, Polat M, Fettahlio Glu-Karaman B, et al. Internalized stigma in psoriasis: A multicenter study. J Dermatol 2017; 44: 885-891.
31. Hashim PW, Chima M, Kim HJ, Bares J, Yao CJ et al. Crisaborole 2% ointment for the treatment of intertriginous, anogenital, and facial psoriasis: a double-blind, randomized, vehicle controlled trial, J Ama Acad Dermatol. 2020 Feb;82(2):360-365.
32. Paul, C., Guenther, L., Torii, H., Sofen, H., Burge, R., Lin, C., Potts Bleakman, A., Mallbris, L. and Poulin, Y. (2018), Impact of ixekizumab on facial psoriasis and related quality of life measures in moderate-to-severe psoriasis patients: 12-week results from two phase III trials. J Eur Acad Dermatol Venereol, 32: 68-72.