Clinical and trichoscopic features in various forms of scalp psoriasis

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Abstract

Background: Scalp psoriasis is often undiagnosed or inadequately treated. The patient himself underestimates the seriousness of this hair disease and consults too late to a dermatologist.

Objectives: The aim of our study was to create a correlation between the clinical patterns and trichoscopy of scalp psoriasis such in a way to help the clinician to make the diagnosis and select the appropriate therapy.

Material & Methods: We gathered all patients affected of scalp psoriasis afferent to Outpatient's hair consultation of the Department of Experimental, Diagnostic and Specialty Medicine, University of Bologna, from January 2012 to December 2018. All patients were evaluated through clinical, trichoscopic examination and a skin biopsy only in doubtful cases. We quantified the severity of the disease with several objective and subjective parameters every 4 months, up to 1 year. We recorded therapies, outcome data and quality of life.

Results: We collected 156 patients affected by scalp psoriasis, identifying 7 clinical patterns with specific trichoscopical correlation. In order of frequency the clinical patterns were: plaque psoriasis (with a prevalence of erythema, silver-white scales and twisted red loops vessels and red dots); thin scales (with silvery-white scales, simple red lines and signet red ring vessels); sebopsoriasis (with greasy scales, erythema with red dots, globules and twisted and bushy red loops at high magnification); psoriatic cap (with silver-white scales, erythema and polymorphic vascular pattern); pityriasis amiantacea (with yellowish adherent scales, erythema and simple red loops capillaries); cicatricial psoriatic alopecia (with erythema associated with yellowish, silver-white scales with twisted and bushy red loops capillaries) and pustular psoriasis (with "flower shape" pustular lesions, erythema simple red loops capillaries).

Conclusions: The description of different clinical patterns of scalp psoriasis and its trichoscopical correlations may help the clinician to make the diagnosis also in atypical presentations and to prescribe an adequate therapeutic regimen.

Introduction

Scalp involvement by psoriasis is observed in around 80% of patients with skin psoriasis and often it represents the first manifestation of the disease[1]. In 25% of patients scalp psoriasis remains the unique localization of the disease[1,2]. Psoriasis of the scalp is usually described as erythematous plaques covered with white-silvery scales, located behind the margin of the hairline, or extended to the peripheric skin of the forehead, ears and occipital area. However, in clinical practice, scalp psoriasis can present with different clinical patterns that are not always easily diagnosed. The diagnosis is mainly based on its clinical appearance, and usually pathology is not needed to confirm the diagnosis. Trichoscopy can be useful in excluding other diseases characterized by erythema and desquamation, such as seborrheic dermatitis. Trichoscopy of scalp psoriasis is well described in the last years where the vascular patterns of psoriatic lesions, seen under dermoscopy with different magnifications, is mandatory for the differential diagnosis[3]. Trichoscopy may be

considered a useful and non-invasive technique in diagnosing scalp psoriasis particularly to differentiate the atypical presentations.

With this study, we evaluated the various manifestations of scalp psoriasis, through clinical and trichoscopical examinations, the prescribed therapies and the therapeutic outcomes.

Materials and Methods

We collected all patients of both sexes with clinical, trichoscopic or histological scalp psoriasis, seen at our Outpatient's Hair Consultation of the Department of Experimental, Diagnostic and Specialty Medicine (DIMES) University of Bologna, from January 2012 to December 2018. The study was approved by our University Ethics Committee.

For each patient, we listed the clinical history, with particular attention to age of onset of the psoriasis, duration of the disease, inheritance, association with psoriatic arthritis or skin psoriasis, other associated pathologies and previous therapies. Subsequently, all patients underwent to a clinical examination of the scalp, pull test, global photography, trichoscopy and scalp biopsy in selected cases.

Pull test was performed in 4-6 areas of the head: the frontal, parietal and occipital part of the scalp, and in particular was focused on the affected areas.

Trichoscopic examination was realized using a FotoFinder® dermatoscope (Teachscreen Software, Bad Birnbach, Germany) with pictures taken both with dry method and after the use of water as interface for wet dermoscopy. Different magnifications (20X, 40X, 70X) were applied in order to better characterize trichoscopic features. Trichoscopy was performed both on the affected areas and on the healthy scalp, in particular on vertex, anterior, parietal and occipital areas.

Each subject was asked to complete the DLQI (Dermatology Life Quality Index). Patients were also followed up after 4 months, 8 months and 1 year to evaluate the therapeutic outcome.

The following assessment scales were used to estimate the extension and the severity of the disease: Severity of Alopecia Tool (SALT) in order to simply evaluate the percentage of the involved scalp[4], Scalp Physician Global Assessment (ScPGA)[5], PSSI (Psoriasis Scalp Severity Index)[6], and VSCAPSI (Videodermoscopy Scalp Psoriasis Severity Index)[7].

Results

We diagnosed scalp psoriasis in 156 patients. Most of the patients were Caucasian (98.08%) and the 67.94% of patients were females (106/156). The mean age was 40.71 years. In 97.44% of

patients the diagnosis was based on the clinic presentation and trichoscopy. Histological examination was necessary in 9 patients with doubtful characteristics: 4 patients complained of history of intense itching of the scalp associated with thin desquamation; 4 patients had signs of cicatricial psoriatic alopecia; 1 patient had pustular and excoriated lesions.

The mean duration of the disease was 3.83 years. A total number of 24 (15.38%) patients had a history of skin psoriasis with maximum PASI reached 18, BSA 36% and PGA 4. Only 7 patients (4,49%) reported a history of psoriatic arthritis diagnosed according to CASPAR criteria. Results divided into subcategories with rating scales and DLQI are summarized in **Table 1**. Based on the clinical pattern, the patients were divided into seven groups subsequently described in order of frequency: plaque psoriasis (34.62%); thin scales (22.44%); sebopsoriasis (17.95%); psoriatic cap (11.54%); pityriasis amiantacea (10.26%); cicatricial psoriatic alopecia (2.57%); pustular psoriasis (1 patient). Trichoscopical features of each different clinical pattern is described in the **Table 2**. In this table we included the presence of erythema, type of scales, pustular lesion and the most common vascular features of scalp psoriasis. In particular, we divided the vascular patterns in 5 categories: twisted red loops and bushy red loops whit a characterization from mild to severe degree of condensation and irregular distribution, better visible at 70x magnification; simple red lines or simple red loops described as single red line, visible at 20x magnification; signet red ring vessels including red rings that showed a circle aspect of capillary; the 5th feature is represented by red dots and globules.

Treatments included keratolytics, topical high potency steroids, associations of topical calcipotriol/betamethasone gel, systemic retinoids, systemic cyclosporin A and biologicals.

Efficacy of the prescribed therapies was assessed after 4, 8, 12 months based on the clinical pattern, pull test, trichoscopy and patient's compliance.

Clinical Patterns

Plaque psoriasis

The presence of scalp psoriasis in plaques was found in 34.62% of patients, 40 were females and 14 males, with a mean age of 38.77 years (Fig. 1a). The mean duration of the disease before diagnosis was 6,44 years. The involvement of the scalp measured with SALT score was 62.51%. sPGA and PSSI were respectively 2,22 and 35,7. On trichoscopic examination 55.55% of patients had erythema, 52% silver-white scales and only 8 patients had yellowish scales (Fig.1b). After removing the scales and with higher magnification the vascular patterns are represented

predominantly by twisted red loops and red dots. VSCAPSI score was 4,67. Medium DLQI was 12,8.

Treatment with topical calcipotriol/betamethasone gel 50 micrograms/0.5 mg/g was effective with 6 relapses (30%) after one year. Patients with greater DLQI and severe scalp psoriasis took also a systemic treatment with acitretin 20 mg/day for 4 months, then reduced 10mg/day. They showed a complete remission after 8 months. Remission was maintained over time despite the discontinuation of the drug. In patients with a strong desquamative component keratolytic agents were also prescribed. In the groups of patients treated with only topical steroids (foam and shampoo), the relapses after 1 year were a bit higher in percentage compared to the group with the associations of calcipotriol. Only one patient with a PASI 18 and DLQI 24 was treated with Sekukinumab and remission occurred after 3 months of therapy.

Thin desquamation

35 patients, showed scalp psoriasis evident as a fine scaling covering the entire scalp or limited to one or more areas. They were 17 males and 18 females, with a mean duration of the disease before diagnosis of 4.83 years. The scales were usually thin, silvery in color, crumbly and associated with mild erythema of the scalp (Fig. 2 a). Hair casts were seen in 11.43% of the patients. Hair casts presented as cylindrical aggregates of scales, which wrapped the hair shaft like tubes, 2-8 mm long, white-yellow, shiny, non-adherent and easily removable[8]. Scalp involvement measured with SALT was 53,81%, with sPGA 1,93 and PSSI 16,75. Pull test was positive in all these patients. On trichoscopic examination, all patients showed the presence of silvery-white scales (Fig. 2 b), 93.75% showed erythema and only one patient had yellowish scales in some areas. The vascular pattern of this type of scalp psoriasis is characterized specially with simple red lines and signet red ring vessels visible both of low and high magnifications.

VSCAPSI was 2,53. Medium DLQI was 6. Despite the fact that trichoscopy was consistent with a diagnosis of scalp psoriasis, in 4 patients, who reported intense itching, a skin biopsy was performed to confirm the diagnosis. Treatment with topical steroids and keratolytic agents was effective in all patients, with a relapse after 1 year of only 17.14% of patients.

Sebopsoriasis

28 patients (19.94%), 14 males and 14 females, with a mean age of 26 years, had sebopsoriasis of the scalp. The mean duration of the disease before diagnosis was 3,92 years. On average the

62,07% of the scalp was affected. sPGA was 2 and PSSI 19,35. Trichoscopy showed greasy scales (78.57%) and the silver scales (50%) and, after removing them with a gentle scratch, erythema with red dots and globules at low magnification, while increasing lens the predominance of twisted and bushy red loops are visible in the interfollicular space (Fig. 3 a-b), with VSCAPSI of 3. Patients often reported itching (64.28%). In 28.57% of patients, sebopsoriasis was associated with an increased hair loss (telogen effluvium). Medium DLQI was 18.

All patients were treated with ketoconazole shampoo 3 times a week and with a topical steroid vehicle in shampoo or in a foam, based on clinical severity. After one year, only 5 patients experienced a relapse of the disease, in line with the seasonality of the worsening of the seborrheic component.

Psoriatic cap

18 patients, 16 females and 2 males with a mean age of 55.67, presented a psoriatic cap (SALT score 91,5%). The mean duration of the disease before diagnosis was 4,83 years, with some patients with acute manifestations. In particular, one of them developed the disease 4 months after starting the application of 5% topical minoxidil solution for androgenetic alopecia; in the other 3 patients the diseases began few days after hair dye. Patch tests confirmed the diagnosis of psoriasiform eruption due to allergic contact dermatitis due to minoxidil and paraphenylenediamine, respectively. The pull test was positive in all patients. sPGA was 3,88 and PSSI was 44. On trichoscopy, all patients showed the presence of silver-white scales, erythema and in 33.33% of the patients showed also yellowish scales (Fig. 4 a-b). Dry trichoscopy is useful to better see the desquamation, while to have a better visualization of the vascular pattern, we had removed the scale and using a liquid as interface that showing the presence of each type of vessels in most of patients, as reported in the table 2. VSCAPSI was 6,35 and medium DLQI was 25,7.

13 patients were treated with a combination therapy of topical and systemic drugs; 6 patients treated with cyclosporine 200 mg per day for 4 months, then gradually reduced and 7 with acitretin 20 mg/day. Patients treated with cyclosporin A improved faster than patients receiving acitretin. At the 12-month of follow-up, almost patients remained recovered; two mild disease recurrences occurred in patients who discontinued cyclosporine. In five patients we prescribed only topical drugs associating 40% urea keratolytic gel, 3 times a week, with clobetasol propionate 0.05% daily, then reduced, with a rapid improvement.

Pityriasis amiantacea

The presence of psoriasis-related pityriasis amiantacea was found in 16 young patients (10.25%), predominantly females (12 females and 4 males). The mean duration of the disease was 3,25 years, with an important involvement of the scalp (SALT score 41,56%). sPGA and PSS were respectively 3,95 and 29,75. On trichoscopy, all patients showed yellowish adherent scales, 75% erythema and only two patients had silver-white scales with a VSCAPSI of 3 (Fig. 5 a-c). The most common vessels type in the interfollicular spaces included simple red loops occurring in 15/16 (93,75%) patients. The second most common type of vessels included signet red ring vessels occurring in 13 (81,25%) patients. Less represented are the twisted and bushy red loops, while red dots and globules are presented only in half of patients. In most cases, the involvement was limited to less than half of the scalp (41.56%); only one patient showed 90% involvement of the scalp. The pull test was positive in all patients with telogen roots. Medium DLQI was 23,5. All patients were treated with a 40% urea keratolytic gel, 3 times a week, associated with clobetasol propionate 0.05% foam, daily for 2 months, then reduced. After 4 months all patients were improved but not healed. Therapy was however reduced to 2 applications per week with remission of the disease in 11 patients after 8 months. A maintenance therapy was retained with one application a week ever after the healing.

Cicatricial psoriatic alopecia

We identified 4 patients with scarring alopecia due to severe scalp psoriasis, diagnosed by histopathology after a scalp biopsy. They were in prevalence females (3 females and 1 male), with a mean duration of disease of 2 years. Alopecia was limited to 35,6% (SALT score) of the scalp; sPGA was 4,5 and PSSI 29,75. Patients presented cicatricial patches of hair loss, with atrophic skin, surrounded by adherent scales. Pull test was positive in all patients with telogen hair roots. In all patients, trichoscopy performed at the margin of the scar showed in all patients erythema with both yellowish and silver-white scales with VSCAPSI of 5,75 (Fig. 6 a-b). Using different magnifications of the lens we observed predominantly the presence of twisted and bushy red loops and a high percentage of red dots and globules. Medium DLQI was 24,6. Topical therapy with clobetasol propionate 0.05% cream, applied daily under occlusion for 2 months, then gradually reduced, was adequate to lead all patient to improve and recovery after 8 months, with no progression of the alopecic scar.

Pustular psoriasis

In our study a female patient presented a form of pustular psoriasis of the scalp that was diagnosed by histological study. She was a 31-year-old woman with a personal history of plantar pustular psoriasis. She developed the eruption in 4 days and when she referred to us the 70% of the scalp was involved (SALT score). SPGA was 4 and PSSI 36. Trichoscopy showed the presence of frank pustular lesions with a "flower shape", erythema and the vascular pattern is represented only by simple red loops involving 70% of the scalp (Fig. 7 a-b) with a VSCAPSI of 1,4. The DLQI was 24.

Treatment with clobetasol propionate 0.05% cream applied under occlusion every day induced prompt remission of the inflammatory signs and it was reduced to a frequency of 3 times a week after 2 months. After 4 months the patient was devoid of scalp signs and the therapy was replaced with a clobetasol propionate 0.05% shampoo with a persistent remission.

DISCUSSION

Our study allowed us to identify 7 different types of scalp psoriasis, with specific clinical-trichoscopic features. The most common patterns were plaque psoriasis, thin scales, sebopsoriasis and psoriatic cap. Pityriasis amiantacea, cicatricial psoriatic alopecia and pustular psoriasis were less represented.

Trichoscopy has been essential for making the diagnosis in all forms of psoriasis. A gentle scratching of the scalp in order to lift the scales and identify the capillaries of the interfollicular space, has made possible to detect the presence of the specific vessels which resulted the main diagnostic trichoscopic sign. For a better use of trichoscopy, it is advisable starts with dry method and then after removing the scales, use a liquid as interface to better observe the distribution and shape of the vessels. Nowadays, the knowledge of trichoscopic features is not yet established to differentiate the atypical clinical presentations and the presence of irregular vessels alone is insufficient to specify the pattern of scalp psoriasis, as this finding may have multiple types[3,9]. Detailed data on dermoscopic differential diagnosis of scalp psoriasis are presented in the table 2 where each form was characterized with the most common type of vessels. In particular, in psoriatic plaque is noted twisted red loops and red dots and globules; in thin desquamation is revealed specially simple red sign and signet red ring vessels; in patients affected by sebosporiasis, the vascular pattern is characterized by all the type of vessels with a homogeneous distribution; in case of pityriasis amiantacea, simple red loops and signet red ring vessels is well represented but

together with red dots and globules in low magnification; in rare case of cicatricial alopecia due to scalp psoriasis, at the margin of the scarring patches it is usually found twisted and bushy red loops associated with red dots and globules; finally, the only case of pustular psoriasis, it is possible to observe simple red loops between the pustules. Our results confirmed the data of the literature about the classical presentations such as psoriatic plaque[9], and identified the specific trichoscopic features in atypical presentations such as pityriasis amiantacea or cicatricial psoriatic alopecia.

Two under-diagnosed entities emerged, i.e. thin desquamation and sebopsoriasis patterns, were often misdiagnosed as seborrheic dermatitis. More in details, sebopsoriasis can occur in the typical sites of seborrheic dermatitis: scalp, margin of the hairline and eyebrows, and often in other areas such as nose, nasolabial folds and pre-sternal area. This particular pattern corresponds to a typical Koebner phenomenon due to seborrheic dermatitis in patients with psoriatic diathesis. Because of this morphological similarity, it can be difficult to distinguish between the 2 diseases, especially if the patient does not manifest typical psoriatic plaques in other body areas. Clinically, sebopsoriasis is characterized by the presence of marked erythema of the scalp associated with a thick accumulation of yellowish-oily scales[10]. Scalp psoriasis presenting as thin desquamation is difficult to diagnose; itching is the exclusive symptom, with scanty clinical signs and a negative history of skin psoriasis. High magnification trichoscopy is mandatory in these cases. As demonstrated in the literature, a comparative dermoscopic study between patients with scalp psoriasis and seborrheic dermatitis, patients with psoriasis had specific capillary aspects while the arborized vessels where present in 80% of the patients with seborrheic dermatitis [11].

Psoriatic cap is a rarely observed clinical pattern, characterized by the confluence of more plaques or by the simultaneous appearance of psoriasis over the entire scalp. The clinical features are similar to plaque psoriasis, with intense patient discomfort and pain. This condition often leads to an increased hair loss in telogen phase and a consequent diffuse hair thinning proportional to the extent of the inflammation. Sometimes a suddenly appearance of a severe psoriasiform reaction is exacerbated by trigger factors, traumatic or inflammatory, which induce a Koebner phenomenon in predisposed patients. An underestimated possible triggering cause is allergic contact dermatitis after the application of hair dyes, aesthetic treatments or topical drugs[11-13].

Pityriasis amiantacea is described as an inflammatory disease of the scalp prevalent in young females. It is characterized by localized accumulations of yellowish, thick and adherent scales difficult to remove, most commonly localized in supra-auricular parietal areas. Mechanical

removal of masses of scales often leads to a detachment of a tuft of hair. Pityriasis amiantacea is considered a reactive inflammatory pattern common to various inflammatory pathologies, often psoriasis, but also seborrheic dermatitis, tinea and some superficial pyogenic infections[14]. Recognize its basic ethiology is decisive for the therapeutic implications.

Pustular psoriasis of the scalp is very rare: it is characterized by the presence of macroscopically visible sterile pustules, associated with the presence of more or less intense erythema of the scalp. It may or may not be associated with other forms of palmoplantar pustular psoriasis[15,16]. Even if trichoscopy evidences the presence of simple red loops between the pustules, is not diagnostic and histopathology is the only way to make the diagnosis.

The majority of patients with psoriatic alopecia has usually a complete hair regrowth, however there are some cases of cicatricial alopecia due to scalp psoriasis, with a prevalence estimated of about 10% of patients[17-21]. In particular, cicatricial alopecia can complicate a long-lasting untreated or unresponsive psoriasis of the scalp, or may occur after staphylococcal superinfection. Clinically, it appears as one or more shiny and atrophic patches and at trichoscopy it is characterized by the absence of follicular ostia and white areas indicating fibrosis. Trichoscopy performed on the hair bearing pericicatricial areas may suggest the diagnosis.

Overall the 67.94% of patients attending our office for scalp psoriasis were females. We can assume that female could be more attentive to hair pathologies, especially for scalp psoriasis, while probably scalp psoriasis affects both sexes equally.

Pull test was positive in 70.65% of patients, indicating that scalp psoriasis is a cause of telogen effluvium. Hair loss usually affects only the psoriatic area of the scalp, but generalized telogen effluvium involving the whole scalp with consequent hair thinning can also occur. A diffuse mild inflammation due to sebopsoriasis can also lead to an increased hair loss.

A histopathological study that compared biopsies on psoriatic and healthy scalp showed that psoriatic specimens contained a greater proportion of telogen and catagen hair follicles compared to healthy scalp specimens[22].

As regards the rating scales (Table 1), they have proven be useful in assessing the severity of scalp psoriasis, with correspondence between the subjective and objective scales in most cases. However, we found that for some patterns there was not the same correspondence, in particular for pityriasis amiantacea, cicatricial psoriatic alopecia and the pustular form. While the ScPGA is an investigator subjective parameter that attributes a certain scale of severity, the PSSI and the

VSCAPSI vary according to the percentage of scalp area involved, that resulted lower in these patterns usually limited to a smaller area.

As skin psoriasis, scalp psoriasis can induce significant emotional discomfort to patients, reducing their quality of life[2, 22-25]. Most of our patients with scalp psoriasis had never had skin psoriasis before because, in our hospital, patients affected by skin psoriasis are treated in our divisional or II level clinics for mild and severe psoriasis.

In our study, where psoriasis was almost exclusively localized to the scalp, we obtained very high DLQI scores, both in the widespread forms than in less extensive ones, such as pityriasis amiantacea or cicatricial psoriatic alopecia. Most of our patients with scalp psoriasis had never had psoriatic skin lesions before because in our hospital patients affected by cutaneous psoriasis (frequently with scalp involvement) are directly treated in our divisional or II level clinics for mild and severe psoriasis.

Among younger patients with sebo-psoriasis, the DLQI was also relatively high if related to the mild severity of the disease. The great discomfort was related to the presence of furfuraceous flaking with itching, with a considerable social distress.

Regarding the response to treatments, we obtained excellent results with symptom resolution in 81.4% of patients after 8 months of treatment. Relapses after one year were seen in 20.51% of patients. The optimal clinical results have been obtained thanks to the pharmacological prescription based on psoriatic pattern, degree of psoriasis, feasibility of use for the patients, and also as we provided correct information about therapy and maintenance.

In conclusion, the complex management of chronic diseases depends on the clarity of the diagnosis and the objectives of treatment; this is particularly true in psoriasis, in consideration of the heterogeneity of its clinical expressions and the variability of responses to therapies. Thanks to our study, scalp psoriasis, a hair disease well known for years, have been better detailed with new entities, often not diagnosed. In addition, we created a correlation between the clinical patterns and trichoscopy in such way to make diagnosis also in atypical cases, without using skin biopsy if not selected patients.

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Tables

Tab. 1: Results divided into the seven groups

Tab. 2: Correlation of clinical and trichoscopical data

Figures:

Fig. 1: Plaque psoriasis pattern (a) and its trichoscopy with erythema and adherent silver scales (b)

Fig. 2: Thin scales pattern (a) and adherent silver scales and hairpin vessels at trichoscopy (b, 20x)

Fig. 3: Sebopsoriasis pattern (a) and trichoscopy after the removing of greasy scales (b,70x)

Fig. 4: Psoriatic cap (a) and silver scales at trichoscopy difficult to remove (b,20x)

Fig. 5: Pityriasis amiantacea of a young woman (a) and accumulations of yellowish, thick and adherent scales at trichoscopy (b, 20x) with hairpin vessels (c, 70x).

Fig. 6: Cicatricial psoriatic alopecia (a) with hairpin vessels at the border of the patch at trichoscopy (b, 70X)

Fig. 7: Pustular psoriasis of the scalp (a) with pustular lesions with “flower shape” (b, 40x)

Table 1: Result divided into the seven groups

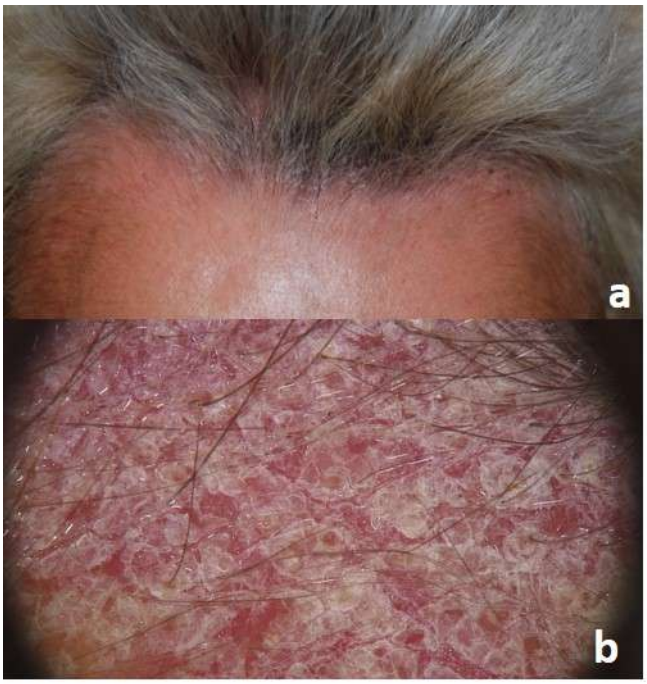
	patients n(%)	F/M	mean age of patients 1°visit	mean age onset (y)	mean duration (y)	psoriasis familiarity (%)	skin psoriasis (n)	PASI	Psoriatic arthritis (n)	BSA	PGA	positive pull test %	SALT %	sPGA	PSSI	VSCAPSI	DLQI
Psoriatic plaques	54 (34.62%)	40/14	38.77	32.48	6.44	0.222	18	5.4	6	5.4	3.9	41	62.5	2.22	35.7	4.67	12.8
Thin desquamation	35 (22.44%)	18/17	48	43.12	4.83	-	1	1.3	-	5	2	25	53.81	1.93	16.75	2.53	6
Sebopsoriasis	28 (17.95%)	14/14	26	22.28	3.92	0.1429	-	1.21	-	3	2	28.57	62.07	2	19.35	3	18
Psoriatic cap	18 (11.54%)	16/2	55.57	51.33	4.33	0.0556	1	3.88	1	7.3	3.12	100	91.55	3.88	44	6.35	25.7
Pityriasis amiantacea	16 (10.26%)	12/4	28.75	26.5	3.25	-	0	2.5	-	3.3	3.95	100	41.56	3.95	29.75	3	23.5
Cicatricial psoriasis	4 (2.57%)	3/1	26.5	28.5	2	-	0	2.3	-	3	4	100	35.6	4.5	29.75	5.75	24.6
Pustolar psoriasis	1 (0.64%)	1/0	31	31	4 days	-	1	4	-	6	4	100	70	4	36	1.4	24

Table 2: Correlation of clinical and trichoscopical data

	Number of patients N (n)	**Erythema**	**Silver-white scales**	**Yellowish scales**	**Greasy scales**	**Pustular lesions**	**Vascular patterns**				
							Twisted red loops	Bushy red loops	Simple red lines	Signet red ring vessels	Red dots, globules
Plaque psoriasis	54 (34.62)	30 (55.55)	28 (52)	8 (14,8)	0 (0)	0 (0)	45 (83,3)	5 (9,25)	2 (3,7)	2 (3,7)	53 (98,1)
Thin desquamation	35 (22,44)	33 (93.75)	35 (100)	1 (2,85)	0 (0)	0 (0)	12 (34,2)	10 (28,5)	35(100)	35 (100)	7 (20)
Sebopsoriasis	28 (17.95)	28 (100)	14 (50)	0 (0)	22 (78.57)	0 (0)	28 (100)	28 (100)	13 (46,42)	15 (53,57)	25 (89,2)
Psoriatic cap	18 (11,54)	18 (100)	18 (100)	6 (33.33)	0 (0)	0 (0)	17 (94,44)	16 (88,88)	16 (88,88)	17 (94,44)	18 (100)
Pityriasis amiantacea	16 (10.26)	12 (75)	2 (12,5)	16 (100)	0 (0)	0 (0)	3 (18,75)	3 (18,75)	15 (93,75)	13 (81,25)	8 (50)
Cicatricial alopecia	4 (2,57)	4 (100)	4 (100)	4 (100)	0 (0)	0 (0)	3 (75)	4 (100)	0 (0)	0 (0)	4 (100)
Pustular psoriasis	1 (0,64)	1 (100)	0 (0)	0 (0)	0 (0)	1 (100)	0 (0)	0 (0)	1 (100)	0 (0)	0 (0)

N number of patients

(n) % of patients



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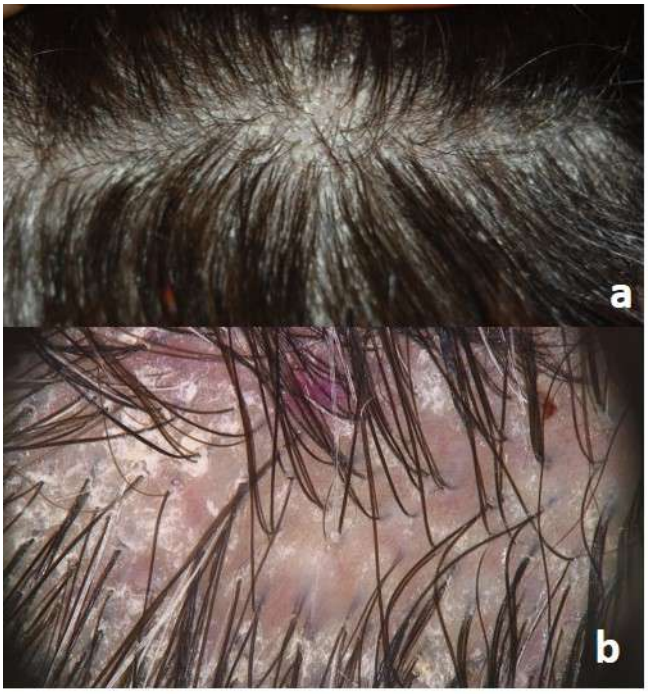

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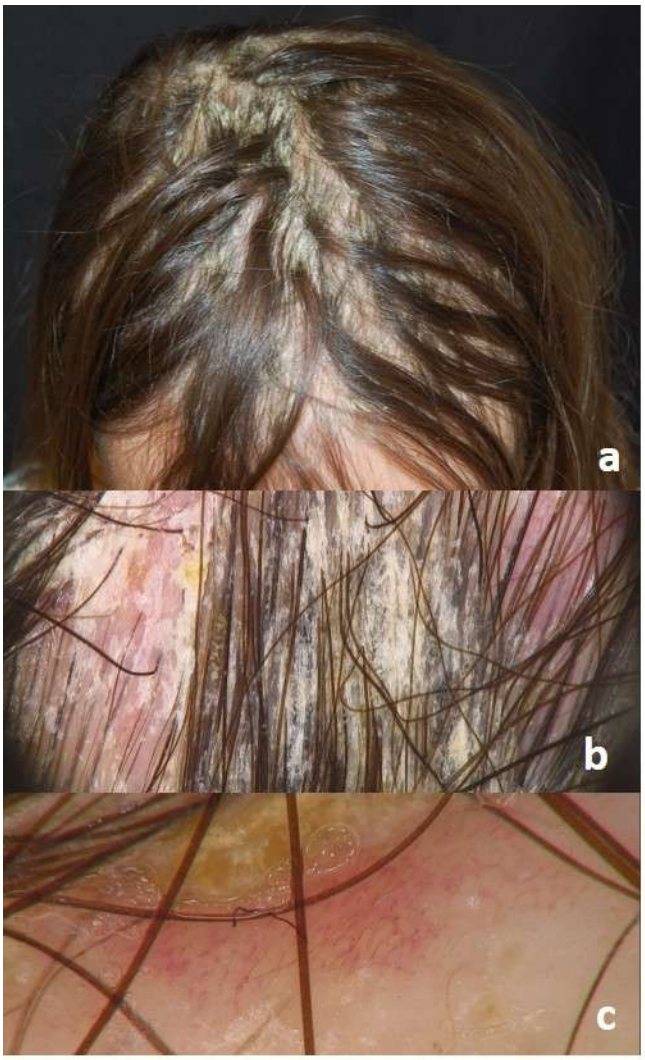

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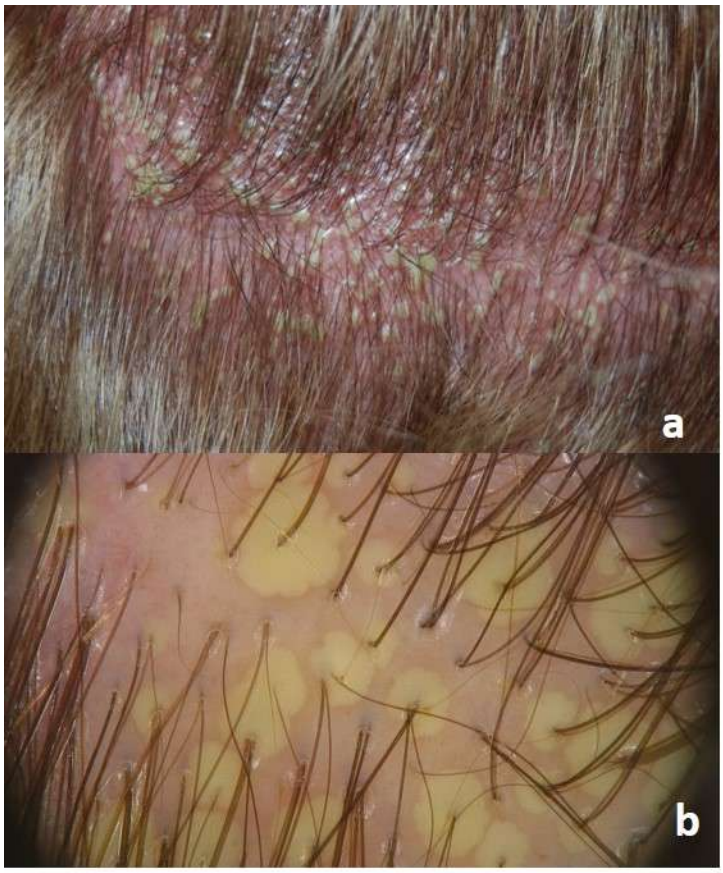

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