

## Psoriasis: a hidden pathology

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**Introduction:** Psoriasis is a non-contagious chronic immune-mediated dermatosis affecting 2% of the world population. The mean age of onset is estimated at 33 years, with 75% of cases starting before the age of 46 [1]. Beside the typical dermatological manifestations directly linked with psoriasis, up to 30% of patients develop psoriatic arthritis (PsA) as well [2]. Other comorbidities frequently associated with psoriasis are chronic immune-mediated pathologies, metabolic syndrome, obesity, cardiovascular complications, depression and psychological disturbances [3]. Lacking information is available concerning the effectiveness of the anti-psoriatic therapies in Italy.

**Materials and Methods:** In the present retrospective observational study conducted in the Local Health Authority (LHA) of Treviso, the following databanks have been consulted for the years 2011-2013: territorial and hospital prescriptions (Cyclosporine, Methotrexate, Etanercept, Infliximab, Adalimumab, Ustekinumab), Therapeutic Plans, exemptions (exemption code 045 for the psoriatic pathology), hematochemical examinations (inflammatory parameters: C-reactive protein- CRP, and erythrocyte sedimentation rate-ESR), schedules of hospital discharges (ICD-9 696.0 Psoriatic arthritis, 696.1 other psoriasis, and 696.2 Para-psoriasis). The linkage between the different databases allowed a clear identification of the cohort of psoriatic patients, as well as of the onset to the psoriatic pathology and the exposition to therapies. Furthermore, the severity of the pathology has been identified based on the administered treatment: mild psoriasis (topic treatments, phototherapy, no treatment), moderate-severe psoriasis (Cyclosporine, Methotrexate, Etanercept, Infliximab, Adalimumab, Ustekinumab).

**Results:** 871 patients have been identified as affected by psoriasis (0,2% of the population of the LHA of Treviso); of which 485 are men; the mean age of onset is 50±10 years. In the considered triennium, an exponential increase of incident psoriatic patients can be detected. Among the 871 patients, 299 are affected by moderate-severe psoriasis. The hematochemical examinations reveal that only the association of biologic and non-biologic drugs (biologics+Methotrexate) allows the inflammatory target to be reached (mean value of ESR: 14±1,5 mm; mean value of CRP: 0,2±0,05 mg/100 ml).

**Conclusions:** The incidence to the psoriatic pathology is increasing among patients of the LHA of Treviso. The introduction of innovative drugs has allowed a better control of the pathology, although the inflammatory target can be reached only in patients treated with an association of biologic and synthetic immune-suppressive drugs (Methotrexate). An in-depth study of the comorbidities will allow the evaluation of psoriasis-related autoimmune disorders, as well as of cardiovascular, metabolic and renal complications affecting the psoriatic population.

### Bibliography:

[1] Nevitt GJ, Hutchinson PE. *Psoriasis in the community; prevalence, severity and patients belief and attitudes towards the disease*. Br J Dermatol 1996; 135:533-537.

[2] Van Voorhees A, Feldman SR, Koo JYM, Lebwohl MG, Menter A. *Psoriasis and Psoriatic Arthritis Pocket Guide: Treatment Algorithms and Management Options*. 3<sup>rd</sup> Edition. The National Psoriasis Foundation.

[3] Boehncke WH, Sterry W. *Psoriasis- a systemic inflammatory disorder: clinic, pathogenesis and therapeutic perspectives*. J Dtsch Dermatol Ges 2009 Nov;7(11):946-52.