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Psoriasis Features in Patients with Inflammatory Bowel Disease

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Keywords: Inflammatory bowel disease; Psoriasis; Clinical features

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Abstract

BACKGROUND: Psoriasis and inflammatory bowel diseases (IBD) share common pathways based on immune dysregulation with an important role of tumour necrosis factor-α and Th17 cells, as well as the genetic background. Several studies showed an increased prevalence of psoriasis in IBD patients. However, data regarding psoriasis features in IBD patients are still lacking.

AIM: We aimed to conduct an observational study to assess psoriasis clinical features and its severity in a group of patients with IBD.

METHODS: Dermatological assessment was performed consecutively in 200 IBD patients (123 with CD and 77 with UC) attending the IBD Care Centre of Gastroenterology at the University of Naples Federico II from 2015 to 2016.

RESULTS: (Please, add text …)

CONCLUSION: This one-year retrospective study showed that psoriasis and IBD both require the use of immunosuppressive drugs so; we can count on a better treatment outcome for both diseases.

Introduction

Psoriasis and inflammatory bowel diseases (IBD), which typically include Crohn's disease (CD) and ulcerative colitis (UC), are chronic relapsing inflammatory conditions [1]. Association between these diseases is confirmed by a common immune dysregulation [increased pro-inflammatory cytokines such as tumour necrosis factor (TNF)-α and activated Th17 cells] and a shared genetic susceptibility and DNA polymorphisms [2], [3], [4]. However, these diseases also show some differences, such as the efficacy of some agents that highlight discrepancies in their pathophysiology [5], [6]. Despite several studies report an increased frequency of psoriasis in IBD patients, data regarding the clinical features of psoriasis in these patients is limited [7], [8].

We conducted an observational study to assess psoriasis clinical features and its severity in a group of patients with IBD.

Material and Methods

The dermatological assessment was performed consecutively in 200 IBD patients (123 with CD and 77 with UC) attending the IBD Care Centre of Gastroenterology at the University of Naples Federico II from 2015 to 2016. The mean age was 45.7 ± 20.5 years (ranging from 16 to 77 years), of whom 98 were males (49%) and 102 females (51%); the mean duration of IBD was 8.7 ± 4.3 years. Almost 30% (n = 60) of patients were treated with biologic drugs (anti-TNF-α such as adalimumab and infliximab) for their gastroenterological disease, whereas 70% (n = 140)

of subjects received conventional therapies (systemic steroids, azathioprine, methotrexate and aminosalicylates). A group of 32 from 200 IBD patients (16%) had a familiar history positive for psoriasis, whereas, medical history and dermatologic examination revealed that 18 (9%) IBD patients were affected by psoriasis: 11 out of these 18 subjects (61.2%) had CD, and 7 had UC (38.2%); no significant differences were found between CD and UC groups. As regards to the 18 patients with both psoriasis and IBD, 8 were females and 10 males (mean age 55.3 years, range 25-75) with a mean IBD duration of 6.7 ± 3.6 years. Concerning psoriasis severity, the mean psoriasis area severity index score was 3.7. Mild psoriasis was more frequent compared to moderate-severe psoriasis [16 (88.8%) vs 2 (11.2%); $P < 0.01$ using Student's t-test] and plaque psoriasis was reported as the most common clinical form (n = 17, 94.5%), followed by palmoplantar pustular psoriasis (n = 1, 5.5%). Scalp (9/18; 50.0%), trunk (5/18; 27.7%), extensor surfaces of the limbs (5/18; 27.7%) and genitals (6/18; 33.3%) represented the sites most frequently involved.

Regarding IBD ongoing treatments, 5/18 (27.8%) patients received mesalazine, 3/18 (16.7%) were on azathioprine therapy, 6/18 (33.3%) received adalimumab, and the remaining 4/18 (22.2%) were on infliximab treatment. In patients with both IBD and psoriasis treated with biologic therapy (10/18, 55.5%) the skin disease was not considered a paradoxical reaction to biologics since all subjects had already shown psoriatic skin lesions before starting anti-TNF-α, as well as for their clinical aspect. Topical therapies based on emollients and low potency corticosteroids were able to control psoriatic skin lesions in all patients with both IBD and psoriasis. Anti-TNF-α use resulted more common in patients with both IBD and psoriasis compared to patients with only IBD (55.5% vs 30%) probably for the increased level of systemic inflammation.

Discussion

As reported in previous studies [8], [9], [10], the prevalence of psoriasis in IBD patients was three times that of the general population (9% vs 3%). Furthermore, IBD patients showed a higher frequency of mild psoriasis because of the anti-inflammatory and immunosuppressive activity of the drugs used for IBD, confirming what reported by Eppinga et al., [11]. The aetiology of the coexistence of psoriasis and IBD is still unknown; the correlation among genetic background, immune dysfunction, systemic inflammation, and dysregulation of gut microbiota may represent possible explanations [12]. It has been supposed that this association could be the result of the influence of environmental and immunological factors, such as IL-17 and TNF- α, in genetically predisposed people [11]. Moreover, Lolli et al. speculated that some immunological mechanisms involved in the pathogenesis of psoriasis (i.e. interleukin-23) might play a role in the observed different psoriasis phenotypes in the IBD population [8].

Finally, despite the well-known association between psoriasis and IBD, our observational study showed a very low frequency of moderate and severe psoriasis forms in patients with IBD. Further studies are needed to highlight eventual peculiarities of psoriatic disease in this setting of patients, to set up adequate management strategies.

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