Single Case

Low Back Pain in Hidradenitis Suppurativa: A Diagnosis Not to Miss!

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Abstract
We report the case of a patient suffering from hidradenitis suppurativa since puberty and complaining of chronic low back pain associated to altered sensitivity and muscular weakness in the right leg. A diagnosis of lumbosciatica was confirmed. Symptoms were not relieved after the use of nonsteroidal anti-inflammatory drugs and analgesics. A surgical decompression was then indicated but heavily debated. Indeed, extended inflammatory and fibrotic hidradenitis suppurativa lesions were located regarding the skin area eligible for the proposed surgery. A combined therapy with clindamycin/rifampicin was started and the surgery was postponed. A complete remission of the articular symptoms was observed 1 month after the start of the antibiotherapy and the inflammatory skin lesions were greatly improved. With the presentation of this clinical case, we would like to discuss the spectrum of rheumatic disorders associated to hidradenitis suppurativa that needs to be correctly diagnosed and taken into consideration in the therapeutic management of the patient.
Clinical Case

We report the case of a 43-year-old patient with a long history of hidradenitis suppurativa (HS) who developed progressive low back pain with neuropathic discharges regarding the external part of the right thigh, leg, and foot. Furthermore, the patient described a predominance of pain in the morning and during exercises and sometimes associated with paresthesia.

The physical examination revealed a decreased muscular strength and a loss of sensitivity regarding the concerned leg. A tomography was performed and showed a lumbar disk hernia regarding L5/S1 vertebrae with a right postero-lateralization. A blood test was performed and the values were within the normal range with a CRP level at 4.5 mg/L.

The chronic use of nonsteroidal anti-inflammatory drugs and analgesics was ineffective and a surgical posterior lumbar decompression was then indicated. Extended inflammatory and fibrotic HS lesions were located in the skin area eligible for the proposed surgery. The surgery was postponed to avoid postoperative complications and a combined therapy with clindamycin 600 mg/day and rifampicin 600 mg/day was started. One month after the start of antibiotics, we noticed a complete remission of the articular symptoms and a great improvement of the inflammatory skin lesions.

Interestingly, the surgery was avoided. The potent anti-inflammatory effect of antibiotics has probably helped to decrease the inflammation surrounding the discuss prolapse [1]. However, this case bring us to discuss the association with an underlying inflammatory rheumatic condition.

Discussion

Rheumatic conditions associated with HS are not widely described in the literature. Articular manifestations have the characteristics of spondyloarthritis with axial or peripheral involvement or both [2]. Their prevalence among HS patients is estimated at 3.7 to 48% [3, 4]. Dermatological lesions develop prior to articular involvement in the majority of cases. Flares and severity of arthritis are positively correlated with exacerbations of HS [4].

Recently, other rare entities related to HS and spondyloarthritis have been described, including PAPA syndrome (pyoderma gangrenosum, acne, and pyogenic arthritis), PASH syndrome (pyoderma gangrenosum, acne, and HS), PAPASH (pyoderma gangrenosum, acne, psoriasis, arthritis, and HS), PASS syndrome (pyoderma gangrenosum, acne, spondyloarthritis, and HS), and PsPASH (psoriatic arthritis, pyoderma gangrenosum, acne, and HS). These syndromes have to be integrated in the interesting auto-inflammatory concept [5, 6].

It is of major relevance to detect and diagnose associated rheumatic disorders in patients suffering from HS in a way to propose an adapted an adjusted therapeutic strategy. Indeed, adalimumab is the first FDA-approved TNF-α blocking agent in HS. Its efficacy has also clearly been demonstrated on HS in two randomized clinical trials, PIONEER I and PIONEER II, which showed a clinically significant response of the disease versus placebo after 12 weeks of therapy (41.8 vs. 26.0% in PIONEER I [p = 0.003] and 58.9 vs. 27.6% in PIONEER II [p < 0.001]) [7, 8].

Adalimumab has also been used for many years in rheumatology as therapeutic option for axial spondyloarthritis, rheumatoid arthritis, psoriatic arthritis, ankylosing spondylitis, and juvenile idiopathic arthritis [9]. Adalimumab represents a treatment of choice in patients suffering from HS with underlying chronic rheumatic inflammatory disease. In addition to the medical therapy, general measures have to be strictly controlled as obesity and smoking habits.
As observed through the presentation of our clinical case, the symptoms reported by the patient were corresponding to usual symptoms associated to lumbar disc extrusion. The diagnosis was confirmed by tomography images. Interestingly, night back pain associated with morning stiffness let us hypothesize the presence of an underlying inflammatory rheumatic disorder.

The rapid clearance of rheumatic symptoms 1 month after the initiation of the combined clindamycin/rifampicin therapy may be explained by the potent anti-inflammatory effect of these drugs acting directly against the inflammation surrounding the herniated disc but also against the inflamed articulations [1]. Surprisingly, we also noticed a great improvement of the inflamed HS skin lesions. The surgery was avoided in this patient and a switch to adalimumab will be proposed. However, adjustment of treatment doses may be necessary to allow adequate control of both skin and joint lesions. Adalimumab dosing should be tailored according to the more predominant features of the overlapping diseases.

The introduction of TNF-α blocking agents should be considered early in the treatment of overlapping HS and the various spectrum of chronic rheumatic conditions. A dynamic interplay between rheumatologists and dermatologists is crucial to optimize the management of HS patients with articulat disease.

Statement of Ethics

The patient signed an informed consent form approved by the Ethics Committee of the Erasme Hospital under the reference number B2016/001.

Disclosure Statement

The authors have no conflict of interest to declare.

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