TAKAYASU'S ARTERITIS FOLLOWING HIDRADENITE SUPURATIVA IN A YOUNG WOMAN: A CASE REPORT OF A RARE ASSOCIATION

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Ana Beatriz Lacerda Costa Saldanha[1], Ana Beatriz Lopes Souza[2], André Sobreira Cavalcante[3], Bruna Pessoa Matias[4], Chiara Gübel Portugal[5], João Victor Viana Fernandes[6], Lara Maria de Oliveira Paiva Freitas[7], Lêda Maria Veloso Bastos[8] and Luciana Maria Pereira de Oliveira[9]

ABSTRACT

Hidradenitis suppurativa, Takayasu's arteritis, and ankylosing spondylitis are chronic inflammatory diseases with distinct pathophysiologies that rarely coexist. We report the case of a 25-year-old female patient diagnosed with all three conditions. Initially presenting with recurrent erythematous lesions and abscesses in childhood, she was diagnosed with hidradenitis suppurativa at age 16 and treated with adalimumab. At 22, she developed inflammatory back pain, leading to a diagnosis of ankylosing spondylitis and subsequent treatment with infliximab. Later, symptoms of systemic vasculitis emerged, and imaging confirmed Takayasu's arteritis. This case highlights a rare association between these diseases, emphasizing shared immune mechanisms and the need for multidisciplinary care.

Keywords: Hidradenitis suppurativa. Takayasu's arteritis. Ankylosing spondylitis. Chronic inflammatory diseases. Autoimmune disorders. Cytokines. TNF-α. Vasculitis. Multidisciplinary care.

[1] Christus University Center, Fortaleza-CE
E-mail: anabeatrizlacerdacosta@gmail.com
[2] Christus University Center, Fortaleza-CE
E-mail: beatrizlopes4329@gmail.com
[3] Christus University Center, Fortaleza-CE
E-mail: andre14cavalcante@gmail.com
[4] State University of Ceará, Fortaleza-CE
E-mail: brunapmatias1@gmail.com
[5] State University of Ceará, Fortaleza-CE
E-mail: chiaraportugal@gmail.com
[6] Christus University Center, Fortaleza-CE
E-mail: joaovvf@hotmail.com
[7] Christus University Center, Fortaleza-CE
E-mail: larapaiva2001@gmail.com
[8] Christus University Center, Fortaleza-CE
E-mail: leda18bastos@gmail.com
[9] Christus University Center, Fortaleza-CE
E-mail: luolivei72@gmail.com

INTRODUCTION

Hidradenitis suppurativa is a chronic inflammatory pathology of the skin that is characterized by deep nodules, recurrent painful abscesses, fistulas, sinus tracts, and scars. These findings are most often seen in body areas rich in apocrine glands. Its pathophysiology is related to the occlusion of follicles followed by their rupture and also immune responses. Takayasu's arteritis is characterized as a vasculitis involving mainly the left subclavian, aorta, common carotid, renal and vertebral arteries. Its clinical picture involves limb claudication, asymmetry of the systolic blood pressure and of the pulses in the limbs, and a murmur. Finally, ankylosing spondylitis is also an inflammatory disease that affects the connective tissues. This pathology is marked by inflammation of the joints, notably of the spine. The present study aims to report a case of association of inflammatory diseases in a young patient who presents, at the same time, the 3 pathologies previously described.

CASE REPORT

A 25-year-old female patient from Fortaleza-CE presented with multiple erythematous lesions located in the lower limbs and genital region in childhood. Evolved with pruritus, bleeding and pus. The lesions remained with periods of remission, but without a conclusive diagnosis. At 16 she was diagnosed with hidradenitis suppurativa. Initiated treatment with adalimumab. At 22, intense pain emerged in the lumbar and sacral regions. It evolved also affecting the thorax and upper limbs. The case showed an inflammatory course and the diagnosis was ankylosing spondylitis. The medication was changed to endovenous Infliximab to improve disease control. Nausea and intense vomiting associated with pain in the upper abdomen and fever appeared. It was found thickening and irregular contours in the left subclavian arteries and arterial trunk, compatible with takayasu's arteritis.The patient has no family history of autoimmune disease.

CONCLUSIONS

The mechanism of hidradenitis suppurativa contains a number of immune factors, with a positive regulation of several cytokines, such as tumor necrosis factor (TNF)-α, interleukin (IL)-1, IL-17, IL-23, contributing to the inflammatory picture. Takayasu's arteritis is a chronic vasculitis of large vessels that may be associated with cutaneous manifestations such as erythema nodosum and pyoderma gangrenosum, with clinical presentation resulting from ischemia due to stenosis or occlusion of the affected arteries. Hydradenitis suppurativa is an uncommon disease, with uncertain prevalence in different

studies, and is commonly associated with inflammatory diseases such as Ankylosing Spondylitis, while vasculitides such as Takayasu's arteritis are an uncommon heterogeneous group of rare diseases. The onset in conjunction with Takayasu's Arteritis is poorly described in the literature, with only one case.

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