


Zoon vulvitis*

Leandro Damiani¹
Várana Posser¹
Ana Letícia Boff¹

Maurício de Quadros¹
Renan Minotto¹

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Abstract: Zoon vulvitis or vulvitis chronica plasmacellularis is a rare, chronic benign inflammation of the vulvar mucosa, diagnosed histologically, with variable therapeutic responses. It is important to be diagnosed because it mimics the presentation of other genital conditions, such as lichen planus and squamous cell carcinoma, which require specific treatment. We report a case of a female patient with three asymptomatic shallow ulcers on the labia minora. Laboratory tests ruled out infectious diseases and the biopsy was consistent with Zoon Vulvitis.

Keywords: Female urogenital diseases; Vulva; Vulvar diseases; Vulvitis

INTRODUCTION

In 1952, Zoon first described a chronic, benign, inflammatory condition of the penis and prepuce, histologically characterized by a plasmacytic infiltrate, which he named *balanitis plasmacellularis*.¹⁻⁶ In 1954, Garnier reported analogous lesions in women as Zoon vulvitis.^{1,3} Since then, only few cases of this condition were described in the literature.⁶ We report here a case seen in our department.

CASE REPORT

A 61-year-old female patient, phototype II, was referred to our department from her gynecologist with an asymptomatic lesion on the vulva, observed in her last routine visit, 3 months back. The patient denied having had prior pathologies or used any medications. Physical examination revealed three well-defined shallow ulcers on the labia minora, with a clean, red-orange base (Figures 1 and 2). Laboratory tests ruled out infectious diseases. Biopsy revealed spongiotic changes and band-like infiltrate rich in plasma cells (Figure 3).

Based on the findings, the diagnosis of Zoon vulvitis was made. The patient was treated with hydrocortisone 2% cream and reviewed monthly, showing slow and gradual improvement of the lesions over the course of five months. Subsequently, the patient was monitored bimonthly and was advised to continue with annual gynecologic follow-up, remaining with no active lesions.

DISCUSSION

Zoon vulvitis is a rare, chronic and benign inflammation of the vulvar mucosa.^{4,2} It affects women with ages between 26 and 70 years, rarely prepubertal girls.^{2,3} It is an idiopathic condition, possibly due to a reaction of the vaginal mucosa to trauma and/or infections.² It is characterized by well-defined, non-infiltrated, orange-yellow-colored plaques with cayenne pepper spots.^{2,3} Erosive lesions, which was the case of our patient, and granulomatous varieties are reported less frequently.^{2,3} It can affect any part of the

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¹ Dermatology Service of Santa Casa de Misericórdia Porto Alegre – Porto Alegre (RS), Brazil.

vulva with a bilateral and symmetrical distribution, with tendency to progressive confluence and to persist for many years.² Malignant changes have not been reported,^{2,3} although lesions with moderate dysplasia have been described.^{7,8} Generally asymptomatic, it can cause dyspareunia, dysuria, itching or pain.^{2,3,5} Diagnosis is made by histological examination, which reveals *dense lichenoid infiltrate* in the upper and middle dermis composed largely by plasma cells (> 50%).^{2,3,6} Additional findings include vascular proliferation, he-

mosiderin deposits and extravasation of erythrocytes.^{2,3} The main differential diagnosis of the case reported *was* erosive lichen planus, however, other conditions such as erythroplasia of Queyrat, pemphigus vulgaris, among others, can be differentiated by *the histology*.^{2,3} Therapeutic options are scarce, with variable clinical outcomes. Most report the use of *high-potency topical corticosteroids* and tacrolimus.^{4,6} Other therapeutic options are estrogen, antifungals, antibiotics, interferon, laser, cryotherapy, etretinate and surgical ex-



FIGURE 1: Shallow ulcers



FIGURE 2: Ulcers with defined edges and margins and with a clean and red-orange colored base

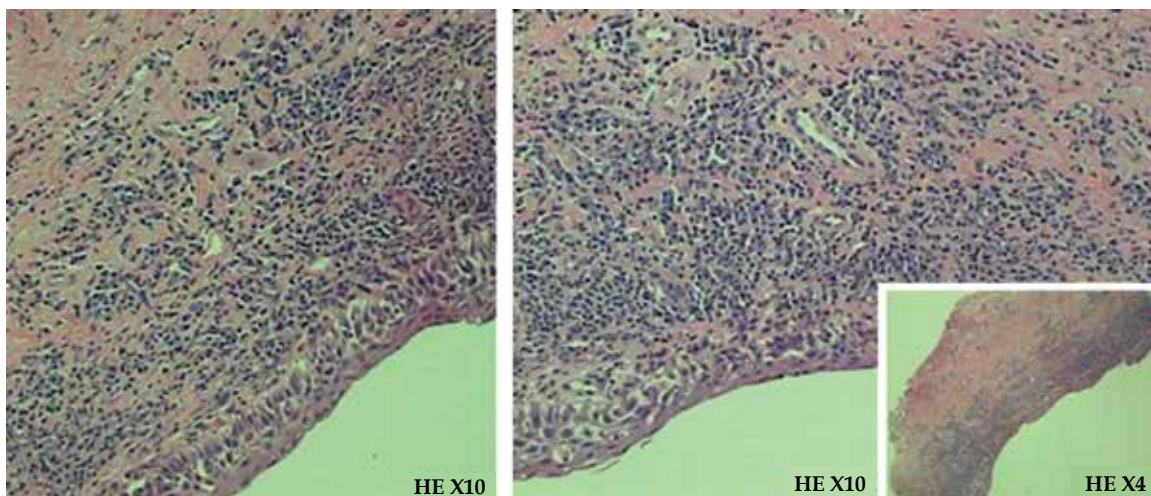


FIGURE 3: Hematoxylin & eosin, X10 and X4: Spongiotic changes, band-like infiltrate rich in plasma cells

cision.^{1,2,3} We opted to prescribe low-potency corticosteroid due to the atrophic physiological changes observed in the patient, who was postmenopausal, and she had a satisfactory improvement. Unlike Zoon balanitis, there are no report of malignant changes with Zoon vulvitis, although cases of lesions with moderate dysplasia have

been described.^{7,8} Therefore, it is advised that patients have a regular dermatological follow-up, repeat biopsies of persistent lesions as well as a periodic gynecologic evaluation to exclude HPV infection or other dysplastic conditions.□

REFERENCES

1. Kyriakou A, Patsatsi A, Patsialas C, Sotiriadis D. Therapeutic efficacy of topical calcineurin inhibitors in plasma cell balanitis: case series and review of the literature. *Dermatology*. 2014;228(1):18-23.
2. dos Reis HL, de Vargas PR, Lucas E, Camporez T, Ferreira Dde C. Zoon vulvitis as a differential diagnosis in an HIV-infected patient: a short report. *J Int Assoc Provid AIDS Care*. 2013 May-Jun;12(3):159-61.
3. Neri I, Patrizi A, Marzaduri S, Marini R, Negosanti M. Vulvitis plasmacellularis: two new cases. *Genitourin Med*. 1995;71:311-3.
4. Bunker CB, Neill SM. The genital, perianal and umbilical regions. In: Burns T, Breathnach S, Cox N, Griffiths C, editors. *Rook's Textbook of Dermatology*. 8th ed. Vol 4. Oxford: Wiley Blackwell; 2010. p.71.61
5. Cooper SM, Wojnarowska F. Anogenital (Non-venereal) Disease. In: Bologna JL, Jorizzo JL, Schaffer JV. *Dermatology*. 3rd ed. London: Elsevier; 2012. p.1175
6. Virgili A, Corazza M, Minghetti S, Borghi A. Symptoms in plasma cell vulvitis: first observational cohort study on type, frequency and severity. *Dermatology*. 2015;230:113-8.
7. Joshi VY. Carcinoma of the penis preceded by Zoon's balanitis. *Int J STD AIDS*. 1999;10:823-5.
8. Vilmer C, Cavelier-Balloy B, Brousse C, Civatte J. Vulvite a plasmocytes au vulvite érythmateuse circonscrite benigne à type erythroplasique de Zoon. *Rev Eur Dermatol MST*. 1990;2: 87-94.

MAILING ADDRESS:

Leandro Damiani
Rua Professor Annes Dias, 295
Centro
90020-090 Porto Alegre, RS.
Brazil
E-mail: damiani_leandro@hotmail.com

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