

Vulvar Enterobiasis: An Uncommon Localization

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Abstract

A case of casual discovery of an enterobiasis vulvar granuloma arising on the vulva is reported in a patient treated by surgery for a squamous carcinoma of the vulva.

Keywords: Vulvar enterobiasis; Genital oxyuriasis; Vulvar carcinoma

Introduction

Pinworms, cosmopolitan intestinal parasites, can sometimes be found in the female genitals, but their location in the labia minora is much rarer.

Case Report

A 53-year-old patient, with no medical history, consulted for a painful vulva swelling, 2.5 cm in diameter. A biopsy revealed an invasive epidermoid cancer well differentiated in the small lip. In addition, near the infiltrating carcinoma, there are foci of polymorphic inflammation (Figure 1) harboring sections of nematodes, with narrow lateral alae, identified as female pinworm containing eggs (Figure 2). The patient underwent a right vulvectomy, the final diagnosis being that of more or less differentiated carcinoma depending on the sector, with nervous involvement, against a background of classic type intraepithelial neoplasia, linked to HPV. Regarding pinworm disease, the patient did not have the notion of a personal or family infestation, nor any evocative symptoms. The hemogram was normal and the parasitological stool examination was negative. She was treated with flubendazole with usual hygiene advice.

Discussion

Pinworms are very common nematodes in children. Located in the lumen of the colon, they can remain asymptomatic for a long time or cause digestive disorders such as mild abdominal pain or diarrhea, but especially anal pruritus, which often has repercussions on family and school behavior. This parasite rarely causes serious lesion such as minute ulcers and mild catarrhal inflammation of the intestine. Sometimes, invasion of the superficial mucosa provokes a granulomatous reaction.

The diagnosis is based on the adhesive cellophane swab, which finds the characteristic eggs and more rarely by parasitological examination of the stools which can reveal eggs and also adult



Figure 1: Biopsy of the small lip: invasive epidermoid cancer well differentiated, and sections of nematode.



Figure 2: Section of pinworm containing eggs (same section as figure 1, x400).

worms, small white nematodes (1cm long). Treatment is based on imidazole derivatives and hygiene measures (treatment of the whole family the same day, keeping hands and finger nails clean, frequent bathing and laundering of night clothes...) But it happens that pinworms are found in ectopic localizations as in the genitals, mostly in young girls [1]. Female pinworms lay eggs on the anal margin and can migrate to the nearby genitals. So, they can be found in the vagina [2-4], from where they can go up the genital tract (uterus, fallopian tubes, ovaries) [5] and also in the peritoneum [6] In these unusual locations, pinworms often cause an inflammatory reaction, such as endometritis, salpingitis or pyosalpinx [7,8] and which can sometimes evoke cervical cancer [9] or genital abscess [10]. A uterine endometrial *Enterobius vermicularis* infestation was the cause of infertility, the woman conceived after treatment of the parasitosis [11].

In these genital sites, the diagnosis is rarely mentioned on the symptomatology such as nocturnal pollakiuria, dysuria, acute urinary infection [12], enuresis, vaginal pruritus, vulvar oedema [13].

It is established either by examining the vaginal smear which finds the eggs [14] or by pathological examination of an excision of an inflammatory type lesion where one finds eggs or sections of adult worms [10]. In the vulva, a granulomatous hyperplastic reaction due to pinworms is uncommon [15] and can evoke a differentiated carcinoma [16]. Such a diagnosis was made on pathological examination of a vulvar biopsy in a 70-year-old woman treated for vulvar cancer [17] as in the case reported above. Localization in the Bartholin glands has already been reported [18]. In all these cases, the inflammatory

phenomena resolved by the appropriate anthelmintic treatment.

Conclusion

Pinworms are worldwide intestinal parasites that can sometimes be found in unusual locations. They are then mostly asymptomatic and found incidentally during an etiological search for another condition. The treatment is identical to that of intestinal infestations.

Conflicts of Interest

The authors declare no conflicts of interest

Informed consent was obtained from the patient for publication

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