

Cervicovaginitis emphysematosa mimicking carcinoma of the cervix: a case report

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Summary

Cervicovaginitis emphysematosa is a rare self-limiting disease in which multiple gas-filled cysts are present in the submucosa of the upper vagina and ectocervix. We report a case in a 40 year-old trader who presented with clinical features suggestive of carcinoma of the cervix. It is hoped that this case report will heighten the awareness of clinicians and pathologists in the recognition of this unusual condition.

Résumé

Le cervicovaginite emphysmatose est une maladie rare et auto-limitante, dans laquelle des multiples kystes remplis des gaz sont present sur la submucuse du vagin superieur et de l'ectocervix. Nous reportons ici le cas d'une commercante de 40 ans qui s'est presenté avec les symptomes clinique suggerant le carcinome cervicale. Il est esperé que le cas rapporté dans cet article Na accroitre la conscience des cliniciens et pathologistes sur la reconnaissance de cette condition peu courante.

Introduction

Cervicovaginitis emphysematosa is an unusual benign self-limiting disease in which multiple gas-filled cysts are present in the submucosa of the upper vagina and portio vaginalis [1]. A case presenting with clinical features suggestive of carcinoma of the cervix is reported.

Case report

A 40 year-old trader was referred to the gynaecological outpatient department of the University College Hospital Ibadan. She was para 5 + 3 with 6 children alive, including a set of twins. She had a course of antibiotics for what was thought to be chronic pelvic inflammatory disease at the referral hospital and was referred because speculum examination revealed severe ulceration of the cervix with associated contact bleeding.

She gave a 1-year history of foul smelling vaginal discharge with associated pruritus vulvae and dyspareunia as well as a 2-month history of initially postcoital and later intermenstrual vaginal bleeding. She had also noticed appreciable weight loss despite negligible decrease in appetite.

Physical examination revealed an anxious but otherwise healthy middle aged lady. She was neither pale nor icteric. The main findings were at vaginal examination which revealed grossly normal vulva with thick yellowish offensive vaginal discharge. The vaginal vault was indurated and there was an ulcerative growth affecting mainly the posterior lip of the cervix which bled readily on contact. The uterus was normal sized and retroverted. There were no adnexal masses and the pouch of Douglas was not distended. Rectal examination did not reveal any parametrial involvement and the pelvic side walls were free bilaterally.

Subsequent examination under anaesthesia confirmed the above findings. A clinical diagnosis of stage II^A carcinoma of the cervix was made and punch biopsy of the cervical lesion was performed.

Microscopic examination of the biopsy specimen showed acanthotic ectocervical epithelium overlying empty spaces surrounded by fibrocollagenous tissue, macrophages, and occasional foreign body giant cells (Fig. 1). The submucosal

glands of the endocervix were dilated and separated by similar spaces and there was stromal infiltration by lymphocytes and plasma cells (Fig. 2). There was no histological features to suggest malignancy. Findings were consistent with a diagnosis of cervicovaginitis emphysematosa.

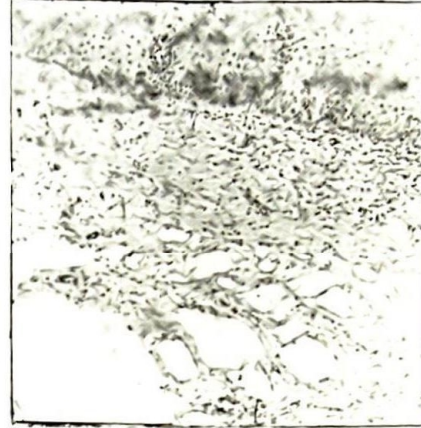


Fig. 1: Normal ectocervical epithelium overlying gas-filled spaces lined by macrophages and surrounding chronic inflammation (Haematoxylin-eosin, X100)

Discussion

Cervicovaginitis emphysematosa is a rare disease [1,2,3]. Kramer and Tobon [4] noted a total of 173 cases in the English literature between the first report by Hugier in 1847, and the 1967 report of Christensen and Curry [5]. Kramer and Tobon [4] added three additional cases in their 1987 review of vaginitis emphysematosa. In 1988 McLallon and Parkin [1] reported a case of emphysematous vaginitis masquerading as carcinoma of the cervix in a 46 year-old woman, bringing the total number of cases to 177. This reported case in a Nigerian female shares many similarities with McLallon and Parkin's [1] case. In both cases there was involvement of the posterior lip of the cervix, but the latter patient had a more extensive lesion with involvement of the posterior fornix and parametria.

The aetiopathogenesis of cervicovaginitis emphysematosa is relatively obscure. A favoured probable aetiological factor is *Trichomonas vaginalis* [1], which has been shown to be capable of generating gas in the tissue of experimental animals [3,4]. It is postulated that the carbon dioxide gas generated in human trichomoniasis accumulates under pressure within discrete submucosal tissue planes to produce characteristic blebs [1]. *Haemophilus vaginalis* has also been implicated but no convincing evidence exists to justify a role for this organism in cervicovaginitis emphysematosa [4]. Other associated factors include pregnancy and cardiopulmonary disease [4]. The diagnosis of cervicovaginitis emphysematosa is usually made incidentally during prenatal examinations, the investigation of leukorrhoea or at necropsy [2]. Gardner and Fernet [2] note with a high clinical index of suspicion, the occurrence of granular vaginitis and multiple cervical blebs should be made the diagnosis of cervicovaginitis straightforward to the clinician. The major differential diagnoses are gas gangrene involving the perineum, genital cancer, and vaginal cysts [2,4].

Cervicovaginitis emphysematosa is an important though uncommon clinicopathological entity which must be clearly distinguished from carcinoma of the cervix because of the

invariable benign course of the disease with spontaneous resolution or response to antitrichomonal treatment in some cases. It is hoped that this case report will heighten the awareness of clinician and pathologist in the recognition of this unusual condition.

References

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