Vaginal Adenosis in a 40-year-old Lady: A Case Report and Review of Literature

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ABSTRACT

Vaginal adenosis, without a history of diethylstilbestrol (DES) exposure, is a rare condition with an unclear etiology. A 40year-old female presented with complaints of persistent excessive watery vaginal discharge. On examination, there was red, patchy, diffuse lesion all over the vaginal wall and cervix. Histopathological examination of the lesion revealed vaginal adenosis. This case is presented here for its rarity.

Keywords: Vaginal adenosis, Adenomatosis vaginae, Treatment.

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INTRODUCTION

Vaginal adenosis is used for a specific abnormality of the vagina. Here, the normal squamous epithelium of vagina is replaced by the columner gland bearing epithelium causing active secretion of profuse clear mucous. Bonney and Glendining first describe a case in 1910 in their article, 'Adenomatosis vagina, a hitherto undescribed condition'.¹

This rare pathology defined as the presence of müllerian type epithelium within the vaginal wall, which is presumed to be derived from persistent müllerian epithelium islets in postembryonic life.^{2,3} Here, there is differentiation of original indifferent müllerian cell or metaplasia of müllerian cell. Spontaneous vaginal adenosis appears to be fairly common in adult women, but it is mostly an insignificant finding on physical examination.⁴

Little is known about the etiology, pathogenesis, symptomatology and management of this poorly understood condition. But its association with *in utero* exposure to diethylstilbestrol (DES) and a subsequent high risk of clear-cell vaginal adenocarcinoma is well known.^{5,6}

Since the withdrawal of DES from the market, this condition is rarely described in the medical literature.

As it is a rare condition, so the diagnosis may be overlooked. However, it should be considered as a possible differential diagnosis in women with persistent vaginal discharge.

A 40 years multipara with vaginal adenosis is reported here along with discussion of treatment options.

CASE REPORT

A 40-year-old lady, para 7, ALC 3 years, was presented with excessive vaginal discharge for 12 years and got admitted in

Obstetrics and Gynecology Department of Sir Salimullah Medical College and Mitford Hospital, as a case of VVF. She was regularly menstruating lady with occasional menorrhagia. She developed profuse nonirritant vaginal discharge 1 month after delivery of her third baby 12 years back. Initially discharge was less in amount but gradually it was increasing day by day. It was neither associated with foul or uriniferous smell nor with itching. She had no urinary problem and normal urge for micturition. She always need protective underclothing for her discharge. There was no dermatological abnormality. Large amount of clear thin mucous were poured out through introitus which she complained as incontinence of urine.

Continuous discharge causes wash leather appearance of vulval skin (Fig. 1). On speculum examination, the mucosa of the whole vagina was hyperemic, stippled granular appearance with sharply demarcated margin (Fig. 2). No urinary incontinence was demonstrated by direct dye test and three swab test. About 250 ml secretion occurred per day (Fig. 3). Level of creatinin in vaginal secretion was 0.7 mg/dl (normal blood level).

Pap smear showed moderate inflammation. HVS and endocervical swab for Gram staining and C/S revealed no abnormality. TVS report revealed bulky uterus and engorged vessel in upper part of vagina. Cystoscopy was normal. EUA revealed reddish, granular lesion in whole vaginal wall except few small areas and narrow collar round the cervix. Uterus was bulky, and cervix normal. Histopathology of tissue from vaginal wall revealed glandular element lined by mucin producing endocervical type of epithelial cells (vaginal adenosis) with mild inflammation (Figs 4 and 5). Endometrial tissues are in proliferative phase. Vaginal lesions were cauterized under regional anesthesia in phases without significant improvement. So, she need vaginal hysterectomy along with resection of adenomatous vaginal wall.



Fig. 1: Macerated appearance of vulva



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Fig. 2: Vaginal adenosis visible on posterior and lateral wall of vagina



Fig. 4: Photomicrograph of vaginal adenosis



Fig. 3: Discharge of vaginal adenosis



Fig. 5: Photomicrograph of vaginal adenosis showing glandular tissue

DISCUSSION

The vagina is lined by noncornified squamous epithelium. An occasional mucous secreting gland may be found in the vaginal mucosa of normal women. It may be small multiple, discrete and without clinical symptom.^{2,6,8} Sandberg (1968) in his study on autopsy of vagina found occult vaginal adenosis in 41% of postpubertal girl in comparison to prepubertal girl.

The clinical appearance of vaginal adenosis is varied. It may present as patchy or diffuse red stippling, granularity or nodularity, single or multiple cysts, erosions, ulcers or even warty protuberances. Occasionally, the process may extend into the vulva.⁵

The symptoms mostly reported as profuse mucoid vaginal discharge, soreness of the vaginal introitus, vaginal bleeding independent of the menstrual cycle (often precipitated by sexual intercourse).

The etiology and effective treatment is unknown. Trauma and inflammation have been reported as pathogenic factors. Though, it is unclear but some studies shows that oral contraceptives play a role in the etiology. Symptomatic vaginal adenosis in postpartum period may be due to trauma or atrophy of the vaginal wall.⁷ Dysplasia of epithelium in vaginal adenosis may occur and turn into adenocarcinoma.

According to current opinion, spontaneous squamous differentiation is thought to occur in most women, if left untreated. The option to wait for spontaneous resolution may not be feasible, if subjective symptoms are severe impairing the quality of life, as in the present case.

Treatment of vaginal adenosis is also a difficult one. The aim of the treatment is to destroy the superficial columnar epithelium and replace by mature squamous epithelium.⁷

 CO_2 laser coagulation can be performed for this purpose.⁵ In resistant cases, vaginal resection with graft may be considered as an ultimate therapeutic option.

In our case, cauterization with a unipolar cautery was chosen to eliminate the lesions. This therapeutic intervention is a simple and available one. Cauterization was done in phases but without any improvement. So after 2 months, vaginal hysterectomy along with resection of adenomatus vaginal wall was performed. Postoperatively her condition improved satisfactorily.

CONCLUSION

Although vaginal adenosis is a rare and generally asymptomatic, it should be part of the differential diagnosis in young patients with persistent vaginal discharge resistant to treatment. Although the etiology of the disease is unclear, it has been suggested that inflammation may have an effect on the pathogenesis of vaginal adenosis without a history of DES exposure. Any suspicious area should have cytological examination and excised or destroyed by diathermy.

The possibility of adenocarcinoma of the vagina developing from this lesion should always be considered, so careful followup is essential.^{1,5}

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