

Vaginal Adenosis in Two Patients with No History of Diethylstilbestrol: A Case Report

Malihe Hasanzadeh^{1*} , Seyedeh Sara Nourbakhsh² , Amir Hosein Jafarian³ ,
Parnian Malakuti⁴ 

1. Professor, Department of Obstetrics and Gynecology, Fellow of Gynecology Oncology, Women's Health Research Center, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran
2. Medical Student, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran
3. Associate Professor, Department of Pathology, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran
4. Medical Student, Faculty of Medicine, Szeged University of Medical Sciences, Szeged, Hungary



Article Info

 [10.30699/jogcr.5.4.175](https://doi.org/10.30699/jogcr.5.4.175)

Received: 2020/05/17;
Accepted: 2020/07/09;
Published Online: 15 Dec 2020;

Use your device to scan and read the article online



Corresponding Information:

Dr. Malihe Hasanzadeh,
Professor, Department of Obstetrics and Gynecology, Fellow of Gynecology Oncology, Women's Health Research Center, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran
Email: hasanzademofradm@mums.ac.ir

ABSTRACT

Introduction: Vaginal adenosis is one of the precursor lesions of the vaginal clear cell adenocarcinoma (CCA). The most common symptom of vaginal adenosis is abnormal vaginal pain and bleeding. About 90% of women exposed to diethylstilbestrol (DES) during pregnancy have vaginal and cervical adenosis in female fetus. DES has been reported rarely with no history of fetal use.

Case Presentation: In this article, we report two vaginal adenosis patients with no history of DES during pregnancy. There was no vaginal cancer in the follow-up of the patients.

Conclusion: Vaginal adenosis is considered as a non-common differential diagnosis of vaginal bleeding that can be diagnosed by physical examination, colposcopy, and biopsy.

Keywords: Clear cell adenocarcinoma, Vaginal hemorrhage, Case report



Copyright © 2020. This is an original open-access article distributed under the terms of the Creative Commons Attribution-noncommercial 4.0 International License which permits copy and redistribution of the material just in noncommercial usages with proper citation.

Introduction

Vaginal adenosis is a metaplastic proliferation of the endocervix or endometrial epithelium of the vaginal wall or vulva (1). Adenogenesis is benign by itself (2) and is a precancerous lesion of vaginal clear cell adenocarcinoma (CCA) (3, 4). About 90% of women exposed to diethylstilbestrol (DES) during pregnancy have developed vaginal and cervical adenosis (2). Vaginal adenosis due to no contact with DES is one of the rare cases compared to those who have been exposed to DES (5, 6). Vaginal adenosis due to no contact with DES has been reported in 10% of adult women (7). The most common symptoms of vaginal adenosis include abnormal vaginal pain and bleeding (8, 7). The majority of patients undergo Pap smear, biopsy, and examination for cancer (9). Four cases of cancers have been reported with a history of no contact with the DES (9).

In this article, we report two patients with vaginal adenosis with no history of contact with DES.

Patient Introduction

Patient 1: A 25-year-old single woman with a complaint of vaginal bleeding in April 2016 was referred to the clinic of Ghaem Hospital, Mashhad, Iran. Ultrasound examination showed an endometrial thickness of 4 mm and hormonal evaluation was normal. Although hormonal medications were prescribed, the bleeding continued. After obtaining the patient's consent, a vaginal colposcopy examination was performed, which showed diffuse mucosal rupture in the upper two-third of the vagina, and a biopsy was taken, which reported vaginal adenosis. The patient did not report any history of fetal DES. The patient

received supportive treatment and her disease is currently under control (Figure 1).

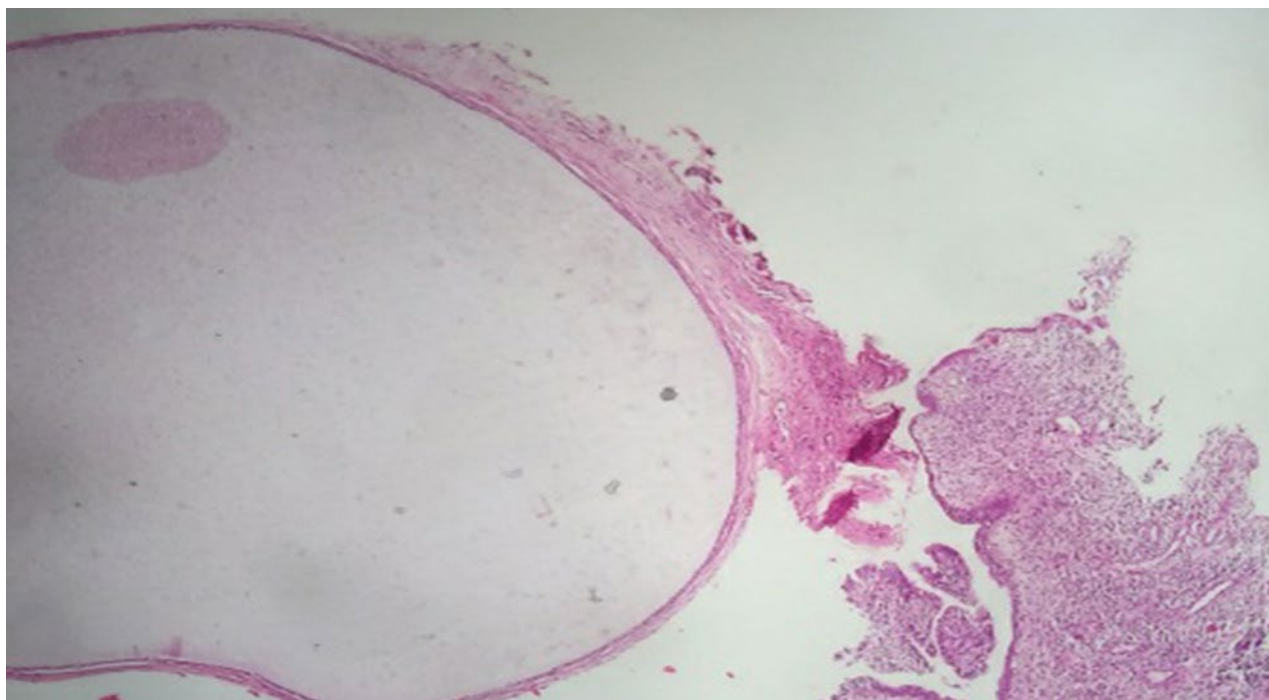


Figure 1: Sections of the vaginal mucosa with foci of endocervical cystic glands in hematoxylin-eosin staining and magnification of 100

Patient 2: A 35-year-old woman without a history of pregnancy complained of vaginal bleeding and was referred to clinic of Ghaem Hospital, Mashhad, Iran in July 2000. Colposcopy examination of the vagina showed stenosis, deformity, and diffuse mucosal lesion, and a biopsy was taken. As a result of the biopsy, vaginal adenosis was reported. The patient did not report a history of fetal DES. Then, the patient became pregnant and underwent a cesarean section due to vaginal stenosis and deformity. After 10 years, her illness was controlled with supportive treatments and no signs of cancer appeared in the annual examinations.

Discussion

The patients reported in this article were two vaginal adenosis cases without a history of DES exposure and no symptoms of vaginal cancer.

Most cases of vaginal adenosis have been reported in women who have been in contact with DES during their embryonic period and cases of no contact with DES are rare (5, 6). The most common symptoms of vaginal adenosis are vaginal pain and abnormal bleeding (7, 8).

In both patients, there was no history of contact with DES during embryonic period and vaginal bleeding was persistent despite drug treatment. No evidence of cancer was found in the patients.

To date, four types of cancers have been reported in cases without prenatal diethylstilbestrol exposure; however, our cases received supportive treatment and

are being followed up without cancer symptoms (9, 10, 11, 12).

One case of cancer following vaginal adenosis was a 39-year-old woman who presented intermittent vaginal pain, dyspareunia, and vaginal bleeding for 20 years. The patient took topical treatment, and a vaginal biopsy was taken due to no improvement in symptoms. In pathology, atypical vaginal adenosis was reported. The patient received Sirolimus treatment but the symptoms and vaginal cytology remained abnormal. Thus, the patient underwent hysterectomy with bilateral removal of the fallopian tubes and removal of the vaginal lesion. After two years of follow-up, a biopsy was taken, which confirmed clear cell carcinoma (CCC), and the patient underwent chemoradiotherapy. After 16 months of follow-up, there was no evidence of recurrence (9).

Conclusion

Overall, according to the obtained results, it may be concluded that using oxytocin drip during hysteroscopy in patients with intrauterine lesions would have no effect on operative blood loss and fluid overload. However, further studies, with larger sample size and modification of confounding factors, are required to obtain more definite results. Also, evaluating other therapeutics is suggested in order to reduce blood loss during hysteroscopy.

Acknowledgments

The authors thank all those who helped them writing this article

Conflict of Interest

Authors declared no conflict of interests.

References

- Martin AA, Atkins KA, Lonergan CL, McHargue CA. Vaginal adenosis as a dermatologic complaint. *J Am Acad Dermatol.* 2013; 69(2):e92-3. [DOI:10.1016/j.jaad.2009.11.590] [PMID]
- Laronda MM, Unno K, Ishi K, Serna VA, Butler LM, Mills AA, et al. Diethylstilbestrol induces vaginal adenosis by disrupting SMAD/RUNX1-mediated cell fate decision in the Müllerian duct epithelium. *Dev Biol.* 2013;381(1):5-16. [DOI:10.1016/j.ydbio.2013.06.024] [PMID]
- Feranec R, Mouková L, Chovanec J. Preinvasive lesions in gynaecology - vagina. *Klin Onkol.* 2013;26 Suppl:S47-8. [DOI:10.14735/amko2013S47] [PMID]
- Harimenshi JM, Jean-Jacques B, Michels JJ. Vaginal adenosis: A case report and literature review. *Ann Pathol.* 2016 Aug;36(4):282-5. [DOI:10.1016/j.annpat.2016.06.003] [PMID]
- González Gleason A, Vera Gaspar D, López Castañares C. Vaginal adenosis and vaginal intraepithelial neoplasia: a review of the literature and a case report. *Ginecol Obstet Mex.* 2009;77(7):329-34.
- Cebesoy FB, Kutlar I, Aydin A. Vaginal adenosis successfully treated with simple unipolar cauterization. *J Natl Med Assoc.* 2007;99(2):166-7.
- Chattopadhyay I, Cruickshank DJ, Packer M. Non diethylstilbestrol induced vaginal adenosis--a case series and review of literature. *Eur J Gynaecol Oncol.* 2001;22(4):260-2.
- Han T, Jin Y, Li Y, Bi Y, Pan L. Clinicopathologic features and outcomes of primary vaginal adenosis as a dermatologic and gynecologic burden: A retrospective study. *Medicine (Baltimore).* 2018;97(49):e13470. [DOI:10.1097/MD.00000000000013470] [PMID]
- Pang L, Li L, Zhu L, Lang J, Bi Y. Malignant transformation of vaginal adenosis to clear cell carcinoma without prenatal diethylstilbestrol exposure: a case report and literature review. *BMC Cancer.* 2019;19(1): 798. [DOI:10.1186/s12885-019-6026-1] [PMID]
- Uehara T, Onda T, Sasajima Y, Sawada M, Kasamatsu T. A case of vaginal clear cell adenocarcinoma complicated with congenital anomalies of the genitourinary tract and metanephric remnant without prenatal diethylstilbestrol exposure. *J Obstet Gynaecol Res.* 2010;36(3):681-5. [DOI:10.1111/j.1447-0756.2010.01178.x] [PMID]
- Satou Y, Takasu K. Clear cell adenocarcinoma in duplicated and imperforated vagina with didelphys uterus. A case report. *J Kyoto Pref Univ Med.* 1990;99:725-38.
- Prasad CJ, Ray JA, Kessler S. Primary small cell carcinoma of the vagina arising in a background of atypical adenosis. *Cancer.* 1992;70(10):2484-7. [DOI:10.1002/10970142(19921115)70:103.0.CO;2-O].

How to Cite This Article:

Hasanzadeh M, Nourbakhsh S S, Jafarian A H, Malakuti P. Vaginal Adenosis in Two Patients with No History of Diethylstilbestrol: A Case Report. *J Obstet Gynecol Cancer Res.* 2020; 5 (4) :175-177

Download citation:

[BibTeX](#) | [RIS](#) | [EndNote](#) | [Medlars](#) | [ProCite](#) | [Reference Manager](#) | [RefWorks](#)