Endocervical Hyperplasia From Oral Contraceptive Pill Use as a Differential for Cervical Masses – A Case Report

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Background

Endocervical lesions have a wide range of differentials from benign polyps to hyperplasia or malignant adenocarcinoma. The endocervix is made up of glandular epithelium which can proliferate in response to hormonal exposure resulting in hyperplasia.

Case Report

A 23-year-old woman was referred with a 7-month history of intermittent cramping lower abdominal pain and a 5cm cervical soft tissue lesion obstructing the endometrial cavity on Pelvic USS (Figure 1) and CT. She reported no symptoms of post-coital bleeding, abnormal discharge or dyspareunia. Her other gynaecological history included that she was a G0P0 and had a history of continuous oral contraceptive pill (OCP) use for 8 years. The patient had completed the full course of Gardasil vaccination.

Results

On examination the cervix looked macroscopically normal and investigations such as the cervical co-test, STI screen and microscopy and culture were negative. A hysteroscopy, dilatation and curettage was performed with histology showing benign endocervical mucoid material and mucosa. Subsequent pelvic MRI demonstrated diffuse thickening and expansion of the endocervical glandular region with an AP diameter of 18mm (Figure 2a). After cessation of the OCP her 4-month surveillance MRI showed significantly reduced thickening with an AP diameter of 10mm (Figure 2b) and resolution of her symptoms.

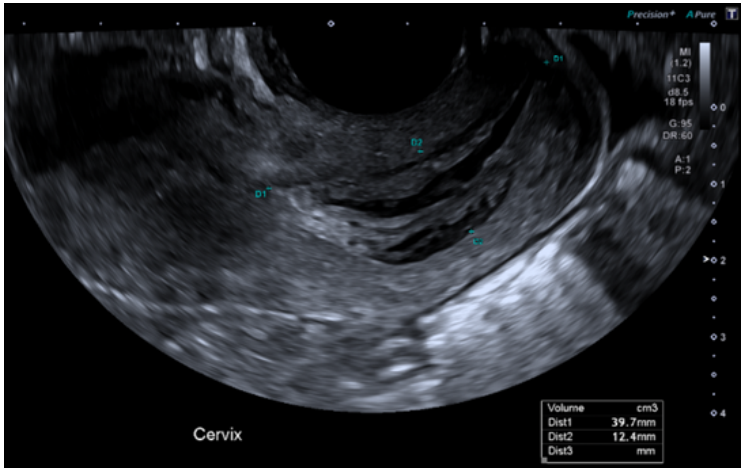

Figure 1. Cystic endocervical mass on Pelvic USS

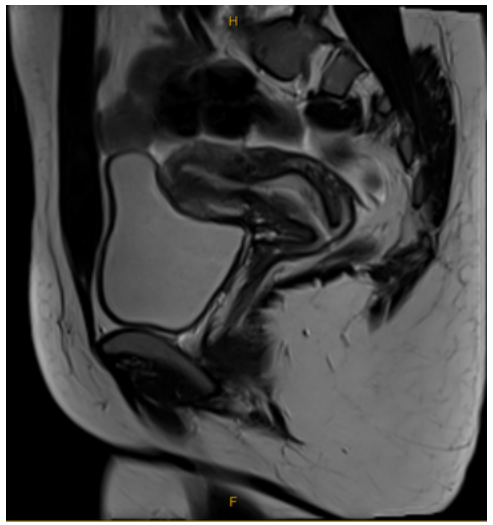

Figure 2a. Initial MRI post D&C

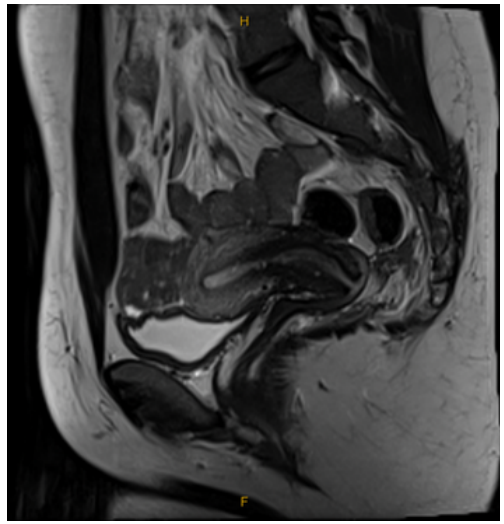

Figure 2b. 4 month surveillance MRI after cessation of COCP

Discussion

Radiological differentiation of cystic endocervical lesions is difficult as pseudoneoplastic lesions such as endocervical hyperplasia, deep Nabothian cysts and cervicitis often share similar characteristics to malignant adenocarcinomas and adenoma malignum[1]. Pre-cancerous lesions such as atypical lobular endocervical glandular hyperplasia (ALEGH) and malignant lesions usually have a combination of cystic and solid components on MRI[1,2]. This can aid in distinguishing them from benign differentials however is not diagnostic, and histological sampling is required to make a definite diagnosis and avoid unnecessary intervention. Endocervical hyperplasia is most commonly seen in women using hormonal therapy, particularly oral contraceptive pills[1], and as seen here can lead to large cervical masses which reduce with cessation of hormonal treatment.

Conclusion

The case demonstrates the difficulty in diagnosing endocervical masses on imaging, and the differential diagnosis of endometrial hyperplasia as a consequence of long term OCP use.

References:
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2. Wan Z, Liu S, Sang N, Tang Y, Wen P, Zhang P, et al. Atypical lobular endocervical glandular hyperplasia: Two case report and literature review. Frontiers in Oncology. 2023 Dec 5;13. doi:10.3389/fonc.2023.1298793