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Radiologic Image

Tunnel Cluster: An Unusual Presentation of a Cervical Mass

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Case History

A 35-year-old woman with no previous history of pelvic pain presented for assessment. No change in general condition. On clinical examination, the cervix was normal and there was no inflammatory syndrome on the laboratory work-up. An MRI scan was performed (Figure A-C).

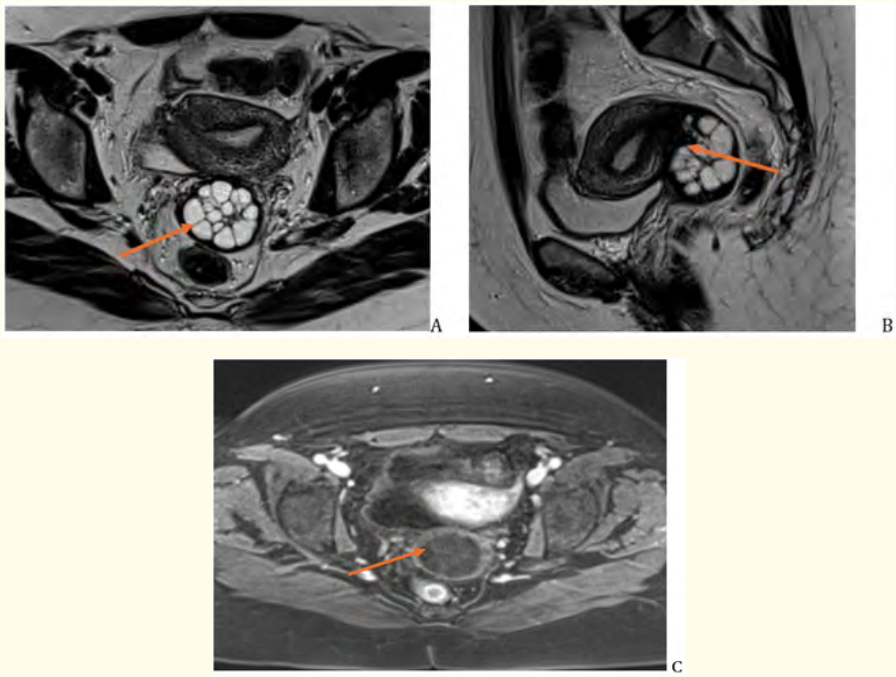

Figure A-C: *T2-weighted axial (A) and sagittal (B) sequences show a multicystic cervical mass measuring 5.5 × 4.5 × 6 cm. The mass exhibits high T2 signal intensity consistent with fluid content, low T1 signal intensity, and no intralesional enhancement (C) or pathological nodule. There is no solid tissue component. The lesion extends into the endocervix.*

Diagnostic: Cystic cervicitis.

Comments

Cystic cervicitis or 'Tunnel clusters' first described by Fluhmann in 1958. This is a multilocular cystic lesion of the uterine cervix. It is a type of Naboth cyst and corresponds to a complex dilatation of the endocervical glands [1]. There are two types of tunnel cluster: type A (non-cystic) and type B (cystic) [2]. The exact pathogenesis of CT is not known, but it occurs in 8% of women, almost exclusively multiparous women aged over 30.

The differential diagnosis is made with cystic lesions of the cervix; benign on the one side: endocervical hyperplasia, Naboth cyst and malignant lesions on the other, such as adenocarcinoma and malignant adenoma [3].

MRI showed a well-limited cystic lesion of the uterine cervix with no tissue budding or stromal invasion. There is no diffusion restriction or pathological enhancement.

They are rarely visible on clinical or colposcopic examination [4].

Signs of benignity are the absence of stromal invasion and of a solid content.

Naboth's cyst can sometimes penetrate deep into the cervical stroma and reach the paracervical soft tissue or serosa.

In difficult cases, the definitive diagnosis should be based on clinical presentation and cervical biopsy.

Knowing the typical radiological appearance can help avoid surgery and the need for histology.

When the diagnosis is confirmed, no treatment or follow-up is necessary.

Bibliography

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