Large cervical tunnel cluster
Tunnel cluster cervical de grandes dimensões

Pedro Brandão*, Filipa Malheiro**, José Ferreira***
Department of Obstetrics and Gynaecology, Centro Hospitalar São João, Porto, Portugal

Abstract

Nabothian cysts are retention cysts of the uterine cervix, which rarely may appear as multilocular large lesions called tunnel cluster. The authors report a case of a complex pelvic mass with 53x43 mm incidentally detected during a CT exam, initially interpreted as an adnexal mass. At ultrasound there was a big cystic tunnel cluster (type B) of the cervix, with more than 12 loci, the largest with 26 mm, with no vascularisation, occupying the whole cervix, with a multilocular pattern at 3-dimensional ultrasound.

Keywords: Cervix Uteri; Nabothian cyst; Tunnel Cluster; Ultrasonography.

Nabothian cysts, also known as retention cysts of the cervix, are collections of retained mucus at the uterine cervix. It is thought to be a reminiscent of chronic cervicitis[1]. They are highly prevalent. They are usually asymptomatic, discovered incidentally during gynaecological examination or imagiologic studies of the female pelvis, such as ultrasound, TC or MRI[2]. Nabothian cysts are usually small, with an average size of 2 – 10 mm but there are anecdotal reports of cysts with up to 80 mm[3–6]. At ultrasound they appear as anecoid cystic formations inside the cervical tissue. When detected in imaging, the main differential diagnoses are myometrial cysts, vascular structures, adnexal masses or malignancy[7]. They are benign and require no treatment.

Tunnel clusters are one specific type of Nabothian cysts[8]. These are multilocular lesions of the cervix, present in 8 percent of female in reproductive age, usually appearing in women with previous vaginal deliveries. They may be non cystic (type A) or cystic (type B)[9–11]. They are no more than a benign group of dilated endocervical glands. Usually these clusters are smaller than 20 mm and have few loci[12].

*MD, Msc, EFOG; Interno de Formação Específica de Ginecologia e Obstetrícia, Centro Hospitalar Tâmega e Sousa
**MD; Interna de Formação Específica de Ginecologia e Obstetrícia, Centro Hospitalar Universitário São João
***MD; Assistente Hospitalar Graduado de Ginecologia e Obstetrícia, Centro Hospitalar Universitário São João

The authors report a case of a 56-year-old post menopausal woman, nulligravida, in whom a complex pelvic mass with 53x43 mm was incidentally detected during a CT exam because of a gastric adenocarcinoma, apparently arising from the right adnexa (Figure 1). At gynaecological evaluation, the cervix was big and had an irregular shape with multiple nodules resembling Nabothian cysts. Pap-smear was normal. At transvaginal ultrasound the uterus was anteverted and deviated to the left. The cervix was impossible to define clearly and the cervical canal was not visible. Both adnexal areas were clear and both ovaries had no lesions. There was a big cystic tunnel cluster (type B) of the cervix, with than 12 loci, the biggest with 26 mm,

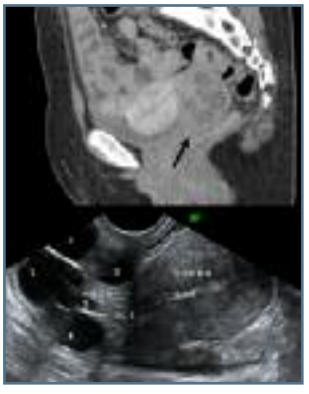

FIGURE 1. CT scan showing a complex pelvic mass with 53x43 mm. US Scan revealing a big cervical tunnel cluster

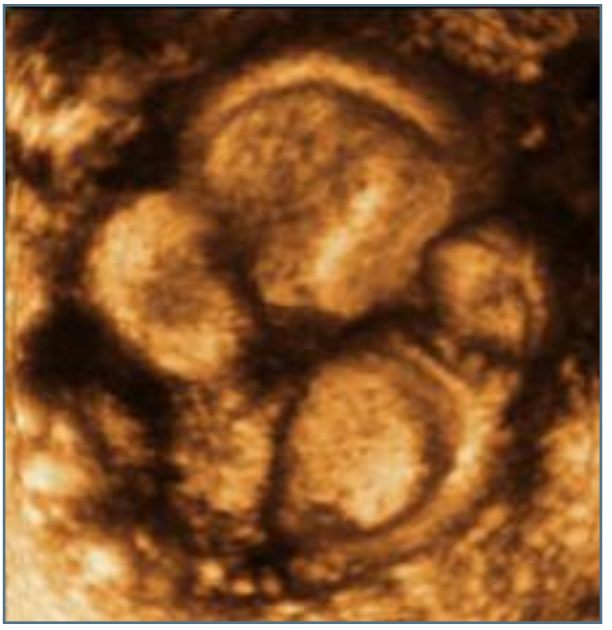

FIGURE 2. Uterine cervix at 3D US showing a multilocular pattern

with no vascularisation, occupying the whole cervix (Figure 1). 3-dimensional ultrasound showed a multilocular pattern (Figure 2). Even though all findings suggested a cervical tunnel cluster – a benign condition – a biopsy was undertaken revealing a cyst with an uniform flattened mucinous epithelium without atipia. Given patient's history of gastric cancer, regular follow-up with 6 months ultrasound and annual pap smear was adopted.

This a case of a large cystic tunnel cluster (type B) of the cervix with several lobules in a nulligravida, incidentally discovered by CT scan and confirmed by transvaginal ultrasound.

REFERENCES

1. Oliveto JM, Muinov L. Cystic Cervicitis. J Comput Assist Tomogr. 2016;40(4):564-566. doi:10.1097/RCT.0000000000000451.

2. Okamoto Y, Tanaka YO, Nishida M, Tsunoda H, Yoshikawa H, Itai Y. MR imaging of the uterine cervix: imaging-pathologic correlation. Radiographics. 2003;23(2):425-45-5. doi:10.1148/rg.232025065.

3. Nigam A, Choudhary D, Raghunandan C. Large Nabothian Cyst: A Rare Cause of Nulliparous Prolapse. Case Rep Obstet Gynecol. 2012;2012:1-2. doi:10.1155/2012/192526.

4. Torky HA. Huge Nabothian cyst causing Hematometra (case report). Eur J Obstet Gynecol Reprod Biol. 2016;207:238-240. doi:10.1016/j.ejogrb.2016.10.042.

5. Vural F, Sanverdi I, Coskun ADE, Kusgöz A, Temel O. Large Nabothian Cyst Obstructing Labour Passage. J Clin DIAGNOSTIC Res. 2015;9(10):QD06-7. doi:10.7860/JCDR/2015/15191.6630.

6. Wu P-Y, Hsu K-F, Chang C-H, Chang F-M. Ultrasonographic Diagnosis and Treatment of a Giant Uterine Cervical Nabothian Cyst. J Med Ultrasound. 2012;20(3):169-172. doi:10.1016/j.jmu.2012.07.006.

7. Sugiyama K, Takehara Y. MR findings of pseudoneoplastic lesions in the uterine cervix mimicking adenoma malignum. Br J Radiol. 2007;80(959):878-883. doi:10.1259/bjr/16282081.

8. Sosnovski V, Barenboim R, Cohen HI, Bornstein J. Complex Nabothian cysts: a diagnostic dilemma. Arch Gynecol Obstet. 2009;279(5):759-761. doi:10.1007/s00404-008-0801-6.

9. Bin Park S, Lee JH, Lee YH, Song MJ, Choi HJ. Multilocular Cystic Lesions in the Uterine Cervix: Broad Spectrum of Imaging Features and Pathologic Correlation. Am J Roentgenol. 2010;195(2):517-523. doi:10.2214/AJR.09.3619.

10. Nucci MR. Symposium part III: tumor-like glandular lesions of the uterine cervix. Int J Gynecol Pathol. 2002;21(4):347-359. http://www.ncbi.nlm.nih.gov/pubmed/12352183. Accessed December 12, 2017.

11. Jones MA, Young RH. Endocervical type A (noncystic) tunnel clusters with cytologic atypia. A report of 14 cases. Am J Surg Pathol. 1996;20(11):1312-1318.

12. Segal GH, Hart WR. Cystic endocervical tunnel clusters. A clinicopathologic study of 29 cases of so-called adenomatous hyperplasia. Am J Surg Pathol. 1990;14(10):895-903.

ENDEREÇO PARA CORRESPONDÊNCIA
Pedro Brandão
Serviço de Ginecologia e Obstetrícia
Centro Hospitalar Tâmega e Sousa
Av. do Hospital Padre Américo 210
4564-136 Penafiel, Portugal
E-Mail: pedrobrandaoleite@gmail.com

RECEBIDO EM: 18/03/2018
ACEITE PARA PUBLICAÇÃO: 22/09/2018