

Accepted Manuscript

“When you hear hoofbeats, think of horses not zebras”: a case of bladder endometriosis in menopause

E Solima , I Pino , G Scagnelli , D BIASONI , M Vignali

PII: S1553-4650(18)31362-1
DOI: <https://doi.org/10.1016/j.jmig.2018.11.012>
Reference: JMIG 3692



To appear in: *The Journal of Minimally Invasive Gynecology*

Received date: 17 November 2018

Accepted date: 19 November 2018

Please cite this article as: E Solima , I Pino , G Scagnelli , D BIASONI , M Vignali , “When you hear hoofbeats, think of horses not zebras”: a case of bladder endometriosis in menopause, *The Journal of Minimally Invasive Gynecology* (2018), doi: <https://doi.org/10.1016/j.jmig.2018.11.012>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

TITLE PAGE**Original Article**

“When you hear hoofbeats, think of horses not zebras”: a case of bladder endometriosis in menopause.

E Solima, I Pino*, G Scagnelli, D BIASONI, M Vignali.

From the Department of Obstetrics and Gynecology (Drs. Solima, Pino, Scagnelli and Vignali) of Macedonio Melloni Hospital, University of Milan, Milan, Italy. Urology Unit (Dr. BIASONI) of Fondazione IRCCS, Istituto Nazionale Tumori, Milan, Italy.

Corresponding author: Ida Pino, MD, Department of Obstetrics and Gynecology, Macedonio Melloni Hospital, University of Milan, Via Macedonio Melloni 52, 20135, Milan, Italy.

E-mail: idapin@inwind.it

Disclosure statement: The authors declare that they have no conflicts of interest and nothing to disclose.

Institutional review board has exempted this manuscript from need of approval.

ARTICLE

Endometriosis is an estrogen-dependent condition characterized by infertility and pain symptoms which mainly occurs during reproductive years. Urinary tract involvement occurs in 1-2% of cases, frequently affecting the bladder. (1) The malignant transformation rate of deep infiltrating endometriosis is low(1 out of 20 nodules), especially in asymptomatic lesions.(2) Most women complain severe pain, but 5% are asymptomatic. (3) We report a case of a rectal-vaginal mass found during a routine pelvic exam in a 60-years-old asymptomatic menopausal woman, with no history of hormone replacement therapy, chronic pelvic pain, infertility or previous gynecological surgery. CT scan showed a mass infiltrating uterus, posterior bladder wall, rectum and pararectal tissue. Pelvic scans confirmed bladder's infiltration with endoluminal vegetations. No nodal enlargement was reported. Pelvic MRI showed two 4-cm complex masses with mild contrast enhancement: the first in the vesico-uterine pouch infiltrating uterus and bladder trigone, the second in the recto-uterine pouch infiltrating rectum, posterior vaginal fornix and uterus. Colonoscopy was performed to characterize bowel involvement and a biopsy on a suspicious area was taken. Histological analysis and urine cytology were negative for malignancy. Office cystoscopy revealed a breakable lesion on the trigone but a biopsy was not taken for the high risk of bleeding. The patient underwent to planned surgery: laparoscopy and cystoscopy. Neither peritoneal nor retroperitoneal suspect lesions were found, both ovaries were firmly adherent to uterus. A bilateral salpingo-oophorectomy and a bladder biopsy were performed. Histological report showed: ovarian, tubal and bladder endometriosis. Zebra is the American medical slang for arriving at an exotic medical diagnosis, when a more commonplace explanation is more likely. Asymptomatic endometriotic lesions can be incidentally detected by imaging or surgery conducted for other reasons on menopausal women, nonetheless the clinician should be aware of this condition to avoid unnecessary expensive diagnostic work-up and consequent patient and physician distress.

REFERENCES

- 1) Gabriel B, Nassif J, Trompoukis P, Barata S, Wattiez A. Prevalence and management of urinary tract endometriosis: a clinical case series. *Urology* 2011;78:1269–74.
- 2) Y. Okazawa, R. Takahashi, K. Mizukoshi, K. Takehara, S. Ishiyama, K. Sugimoto, M. Takahashi, Y. Kohima, M. Goto, A. Okuzawa, Y. Tomiki, T. Tao, K. Sakamoto A case of clear cell adenocarcinoma arising from endometriosis of the rectum treated by laparoscopic surgery *Int. J. Surg. Case Rep.*, 5 (12) (2014), pp. 979-983
- 3) Koninckx PR, Ussia A, Adamyan L, Wattiez A, Donnez J. Deep endometriosis: definition, diagnosis, and treatment. *Fertil Steril.* 2012 Sep;98(3):564-71.

ACCEPTED MANUSCRIPT

FIGURE LEGENDS



Fig. 1 Macroscopic aspect of endometriotic lesion on the trigone during cystoscopy

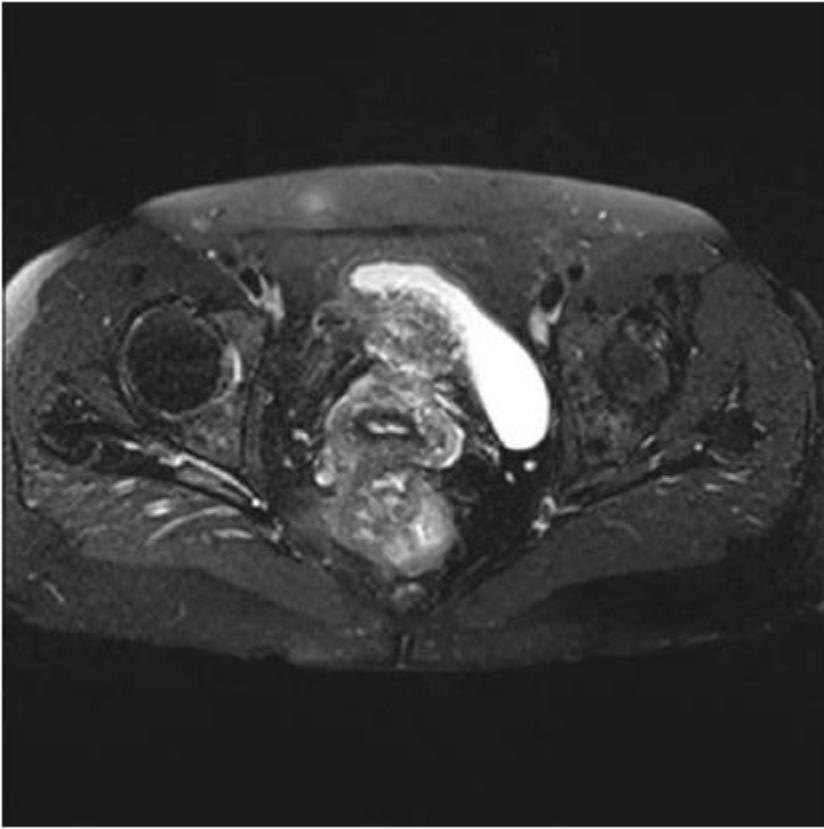


Fig. 2 Pelvic MRI showed a complex mass in the vesico-uterine pouch infiltrating the anterior wall of the uterus and the bladder trigone