

Deep infiltrating endometriosis: review of the ultrasound parameters for an optimal surgical management

Introduction

Deep infiltrating endometriosis (DIE) lesions show a multifocal distribution. Accurate ultrasound pre-surgical mapping of endometriotic disease is essential for an optimal preoperative planning and patient counselling. The aim of this study is to evaluate the accuracy of transvaginal ultrasound (TVS) in the diagnosis of posterior deep pelvic endometriosis and to propose a surgical-ultrasound score system for a correct disease classification and localization and for an accurate pre-surgical management.

Materials and Methods

In this retrospective study were enrolled 104 women who underwent laparoscopic treatment for deep infiltrating endometriosis from January 2009 until June 2012. The transvaginal ultrasound examination (TVS) was performed by the same sonographer. All potential locations of DIE in the anterior (bladder) or posterior compartment (vagina, rectovaginal septum, torus and uterosacral ligaments, parametria and ureteral involvement, rectum and recto-sigmoid junction) were examined. Surgical and histological findings were retrospectively compared with the ultrasonographic preoperative diagnosis.

Results

Posterior DIE alone was found at surgery in 91 patients out of 104 (87,5%), anterior DIE alone in 1 patient out of 104 (0,96%), while posterior and anterior DIE lesions were found associated in 12 patients out of 104 (11,54%). The overall accuracy of ultrasound diagnosis of DIE in the anterior and posterior compartment was of 97,1% e 95,1% respectively. However, we found such a difficulty in the diagnostic evaluation of certain anatomical sites like uterosacral ligaments, vagina and recto-vaginal septum. This finding, in many cases possibly due to technical difficulties, in part may be also due to the different language adopted between different operators, in particular between surgeons and sonographers. Therefore we developed a new score system for endometriosis pre- and post-surgical mapping and classification (Endometriosis Surgical-Ultrasound Score System) with the aim to offer a useful and simple tool for the disease classification both to the sonographer and the surgeon.

- Studio prospettico per la validazione dell'Endometriosis Ultrasound Score System su una popolazione di donne con diagnosi ecografica di endometriosi profonda che si sottopongono ad intervento chirurgico e correlazione tra Score ecografico-chirurgico e stadio della malattia e difficoltà chirurgica.
- Studio su associazione ecografica di adenomiosi ed endometriosi e successiva conferma istologica ed associazione tra adenomiosi e sede di patologia endometriosica.

Partecipazione a congressi

- 3° Corso Teorico-Pratico di Ecografia Transvaginale 2D e 3D in Ginecologia e 1° Trimestre di Gravidanza. SIEOG. Montecatini Terme 20-21 Aprile 2012
- 7° congresso nazionale SEGI and X International biennial meeting. Maratea, 17-19 maggio 2012
- 22nd World Congress on Ultrasound in Obstetrics and Gynecology. Copenhagen 9-12 Settembre 2012
- Corso di trattamento laparoscopico dell'endometriosi pelvica: ruolo della diagnostica ecografica 2D e 3D per il corretto management della paziente. Avellino 5 Ottobre 2012
- XX FIGO World Congress Gynecology and Obstetrics. Roma 7-12 Ottobre 2012
- 2nd Asian Conference on Endometriosis. Istanbul 9-11 Novembre 2012
- 1st European Congress on Endometriosis. Siena 29 Novembre-1 Dicembre 2012

Abstract presentati a Congressi

Ultrasound evaluation of pelvic deep infiltrating endometriosis (DIE): accuracy in differentiating rectal from sigmoid lesions

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Vaginal danazol in women with endometriosis: different schedule for a long-term treatment

Lucia Lazzeri M.D., Serena Pinzauti, M. D., Sandro Razzi, M.D., PH.D., Claudia Tosti, M.D., Gabriele Centini, M.D., Stefano Luisi, M.D., Ph.D, Felice Petraglia, M.D. Obstetrics and Gynecology, Department of Pediatrics, Obstetrics and Reproductive Medicine, University of Siena, Siena, Italy **XX FIGO World Congress gynecology and obstetrics. Roma 7-12 Ottobre 2012**

Ultrasound before surgical approach for DIE

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Department of Obstetrics and Gynecology, Università degli Studi di Roma "Tor Vergata", Rome, Italy.; **2nd Asian Conference on Endometriosis. Istanbul 9-11 Novembre 2012**

Preoperative ultrasound evaluation of uterosacral ligaments endometriosis and parametrial involvement: a relationship with ureteral dysfunction.

1Lucia Lazzeri, 2Alessandra Di Giovanni, 1Gabriele Centini, 1Serena Pinzauti, 2Caterina Exacoustos, 1Stefano Luisi, 3Mario Malzoni, 1Errico Zupi and 1Felice Petraglia

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1st European Congress on Endometriosis. Siena 29 Novembre-1 Dicembre 2012

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1Alessandra Di Giovanni, 2Lucia Lazzeri, 2Claudia Tosti, 2Serena Pinzauti, 1Caterina Exacoustos, 2Stefano Luisi, 3Mario Malzoni, 2Errico Zupi and 2Felice Petraglia

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Pubblicazioni Scientifiche

-Serum anti-Müllerian hormone, inhibin B, and total inhibin levels in women with hypothalamic amenorrhea and anorexia nervosa

Luisi S, Ciani V, Podfigurna-Stopa A, Lazzeri L, De Pascalis F, Meczekalski B, Petraglia F. Gynecol Endocrinol. 2012;28(1):34-8

-New perspectives for the treatment of endometriosis

S. Luisi, V. Ciani, S. Pinzauti, C. Tosti, L. Lazzeri, S. Razzi, E. Zupi, F. Petraglia Ginecorama, Anno XXXIV N.1, Febbraio 2012

-Reduced pelvic pain in women with endometriosis: efficacy of long-term dienogest treatment. Petraglia F, Hornung D, Seitz C, Faustmann T, Gerlinger C, Luisi S, Lazzeri L, Strowitzki T. Arch Gynecol Obstet. 2012;285:167-73

-Non-hormonal targets for the medical treatment of endometriosis

Luisi, S., Ciani, V., Pinzauti, S., Tosti, C., Lazzeri, L., Razzi, S., Zupi, E., Petraglia, F. Journal of Endometriosis 2012;4:85-92.

-Use of venlafaxine in psychiatric disorders and climacteric syndrome: is a therapeutic bridge?

Luisi S, Castrogiovanni A, Ciani V, Pacchierotti C, Capua AD, Pasquini R, Lazzeri L, Petraglia F
Gynecol Endocrinol. 2012;28:68-71

-New perspectives for the treatment of endometriosis

S. Luisi, V. Ciani, S. Pinzauti, C. Tosti, L. Lazzeri, S. Razzi, E. Zupi, F. Petraglia Arch of Perinatal
Medicine 2012;18:22-26

-Hormonal strategy for the primary or secondary treatment of endometriosis

L.Lazzeri, C. Tosti, S. Pinzauti, C. Orlandini, S. Luisi, F. Petraglia Expert Rev. Obstet. Gynecol.
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