

# Obturator abscess with spread to the thigh after three years from a transobturator procedure

Francesco ARACO,<sup>1</sup> Gianpiero GRAVANTE,<sup>2</sup> Davide DE VITA,<sup>3</sup> Daniele KONDA,<sup>4</sup> Pasquale ROMBOLA,<sup>1</sup> Placido ARACO<sup>1</sup> and Emilio PICCIONE<sup>1</sup>

<sup>1</sup>Section of Gynecology and Obstetrics, Department of Surgery, School of Medicine, 'Tor Vergata' University Hospital, Rome, Italy,

<sup>2</sup>Department of Hepatobiliary and Pancreatic Surgery, University Hospitals of Leicester, Leicester, UK, <sup>3</sup>Section of Obstetrics and Gynecology, S.Francesco D'Assisi, Oliveto Citra, SA, Italy, and <sup>4</sup>Department of Diagnostic Imaging, Molecular Imaging, Interventional Radiology and Radiation Therapy, 'Tor Vergata' University Hospital, Rome, Italy

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## Introduction

Stress urinary incontinence (SUI) is a common chronic condition that usually affects middle-aged women. Treatments have evolved over the years and, in 2001, a minimally invasive procedure, the outside-in transobturator (TOT) technique was developed.<sup>1</sup> This involved the use of a synthetic sling for the reinforcement of the urethra. However, as all synthetic slings are foreign bodies, different types of erosions and infections have been described.<sup>2</sup> We report the case of a late obturator abscess manifesting three years after a TOT sling procedure.

A 44-year-old woman presented with SUI and urethral hypermobility without vaginal prolapse. Urodynamics confirmed SUI without detrusor overactivity. The patient underwent in 2004 a TOT procedure with Obtape (Mentor-Porges, Le Plessis Robinson, France), a thermally bonded, non-knitted, nonwoven polypropylene mesh. Perioperative antibiotic prophylaxis consisted in metronidazole. The procedure was carried out under spinal anaesthesia without complications and the patient was dismissed during the first postoperative day. Outpatient follow-up visits after six and 12 months revealed a complete resolution of SUI.

After nearly two years since the operation, one episode of burning vaginal discomfort manifested without vaginal secretions. On that occasion she did not inform us about the symptoms as these were mild and in fact spontaneously resolved after three days without treatment. After three years she presented with a ten-day history complaining of fever, right groin pain, vaginal discharge and walking difficulties. On physical examination the left obturator internal muscle was tender and its palpation elicited pain. Examination

revealed an exposed mesh through the vaginal erosion. Magnetic resonance imaging (MRI) of the pelvis was performed to check the pelvic status and possibly locate the mesh, but this showed an abscess located in the adductor magnus, adductor brevis, external obturator and internal obturator muscles with fistulisation into the vagina (Fig. 1). The mesh was not visualised with the imaging study. After intravenous antibiotics (ceftriaxone and metronidazole), the patient underwent drainage of the abscess through a 3-cm sagittal incision in the anterior vaginal wall under the midurethra. The remaining tape was removed with difficulty, as partially integrated and degraded by the host tissue, the cavity was then washed out with hydrogen peroxidase and iodine/povidone and a drain was inserted. The wound was closed with Prolene 2/0, the drain was removed after 48 h, and the patient was discharged from hospital on the fifth postoperative day. No postoperative MRI was conducted because of the resolution of the acute symptoms obtained with the drainage. Antibiotics were maintained for seven days.

One year later the patient was re-admitted complaining of a yellow serous vaginal discharge from the same side. Because of the lack of systemic symptoms of infection (fever, raised white blood cells or neutrophilia), she was treated with intravenous antibiotics only (ceftriaxone and metronidazole) for seven days. To date, the patient has no recurrence of the infection or the SUI.

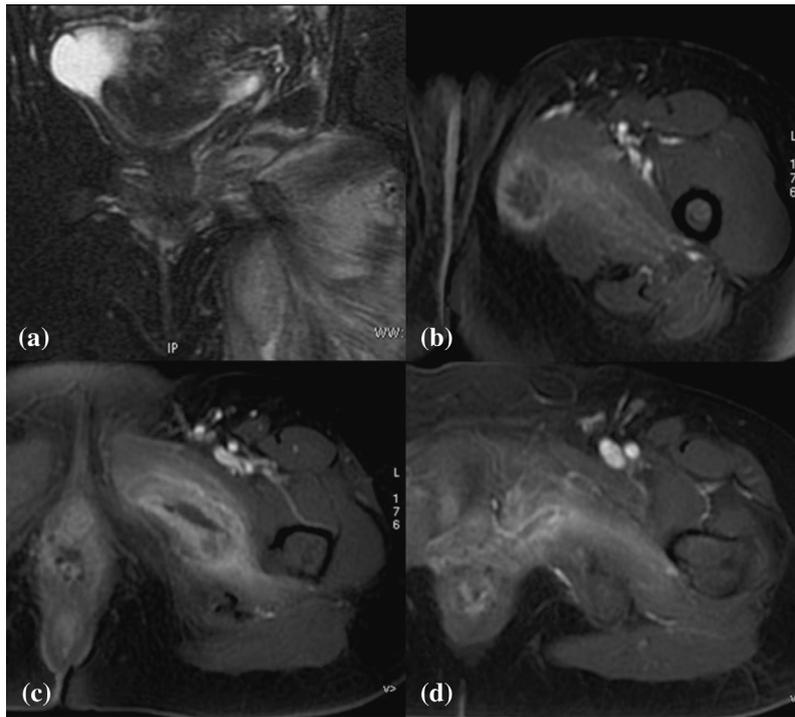
## Discussion

Different cases described the occurrence of abscesses following TOT surgery.<sup>3-6</sup> In all, the site of infection (thigh) was explained by the course through the anatomical structures.<sup>6</sup> Our patient shows that transobturator abscesses may manifest even years after surgery and should be suspected with symptoms of sepsis and a positive history of TOT. In such cases, a MRI proves helpful to address any doubts in order to immediately diagnose the condition and remove the mesh. We did not use at that time a type 1 polypropylene mesh, which has a very low rate of infection. This type of presentation is exceedingly unlikely with the

*Correspondence:* Dr Francesco Araco, Section of Gynecology and Obstetrics, Department of Surgery, School of Medicine, 'Tor Vergata' University Hospital, Viale Oxford 81, 00133 Rome, Italy. Email: araco@libero.it

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**Figure 1** 1.5 Tesla magnetic resonance imaging of the pelvis. Coronal plane fat suppressed T2-weighted image showing hyperintensity of the adductor magnus and brevis muscles (a). Axial plane fat suppressed T1-weighted postcontrast images showing an abscess with ring enhancement located in the adductor magnus and brevis muscles and in the external and internal obturator muscles (b and c) with fistulisation into the vagina (d).

currently used tapes for stress incontinence procedures. However, should they occur, an initial conservative management with intravenous antibiotics only is highly undesirable and a gynaecological consultation with an experienced surgeon is mandatory to avoid unnecessary procedures (that is opening the thigh). Removal of the entire tape resolves the acute symptomatology and may help prevent recurrences, for this reason it should occur promptly rather than delaying this operation with intravenous antibiotics. After the tape removal, should any symptom of sepsis occur later a trial of antibiotics may be performed but if symptoms persist or recur a radical approach is, again, preferred.

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