

# Managing an incidental abscess after secondary insertion of transobturator tape

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**Abstract:** During the last 5 years the transobturator tape (TOT) procedure has become a frequent surgical technique for the treatment of SUI instead of retro pubic vaginal tape (TVT). The cure rates are almost identical in a range of up to 90%. Nevertheless, these very good results are associated with rare complications such as fistulas and abscesses. Due to the low complication rate it is always a challenge to treat such complications since general guidelines are missing.

**Key words:** TOT; SUI; Abscess; Tape.

## CASE REPORT

We report on a rare complication of adductor muscle abscess following a second insertion of a suburethral transobturator tape for SUI.

Our typical procedure in patients with SUI-recurrence due to a loose or slipping sling or with bladder emptying problems due to sling obstruction is as follows: we cut or, if possible, remove the middle part of the tape in a first operation. If necessary at least three months later we insert a new tape in a second operation.

In this case we changed our routine due to the strict order of the patient. She, a 53-year-old woman presented a secondary SUI after TOT and infracoccygeal sacropexy (Posterior IVS "PIVS") for enterocoele 4 years ago. Vaginal ultrasound showed that the tape "slipped" to bladder trigonum without any closing function of the urethra. No erosions or inflammatory signs were noticed. We explained our above mentioned typical procedure to the patient. But she decided to have the new TOT sling at the same time. We removed the middle part of the old tape and inserted a new one. There was no intraoperative complication, the patient was continent and discharged 5 days after the operation.

She came back 8 days p.o. with acute pain in the medial aspect of her left thigh. Blood values showed increased CRP of 333.7 mg/l and leukocytes of 15.2 /ml. Transvaginal examination and ultrasound showed a correct position of the tape, without any signs for haematoma, abscess or residual urine.

Doppler ultrasound excluded thrombosis, but showed a fluid structure in the left adductor space, in a CT-scan this was interpreted as an old haematoma (Figure 1).

After excluding other infection foci by thorax-X-ray, urine and blood culture, intravenous antibiotic treatment was started with cephalosporin 3rd generation and metronidazole. Because fever continued up to 39 degree Celsius, CRP was still 272 mg/l and the patient suffered from pain in the left upper leg, a second CT-scan was performed on the 12<sup>th</sup> day p.o.. At this time the CT showed a suspicion of abscess in the left adductor space (Figure 2 and Figure 3).

Our surgeon recommended a CT-guided drainage by interventional radiology to flush out the pus with NaCl instead of open surgery (Figure 4). Microbiology of the pus resulted in *Staphilococcus constellatus*. We performed this treatment until the 21<sup>st</sup> day p.o.. We abstained from removing the new tape.

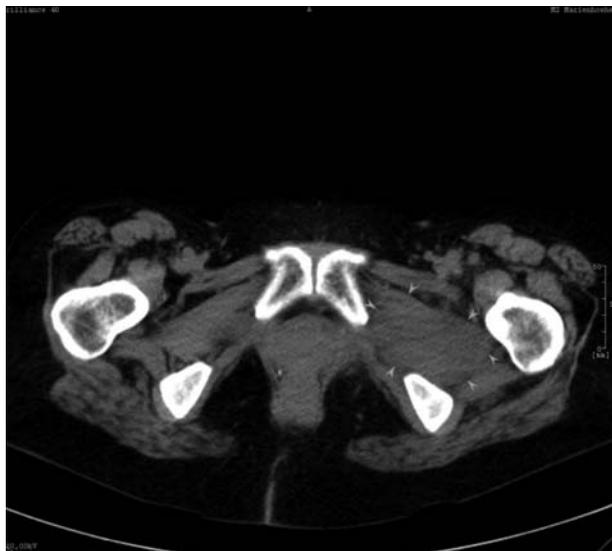


Figure 1. – Initial CT, 8 days post-op.

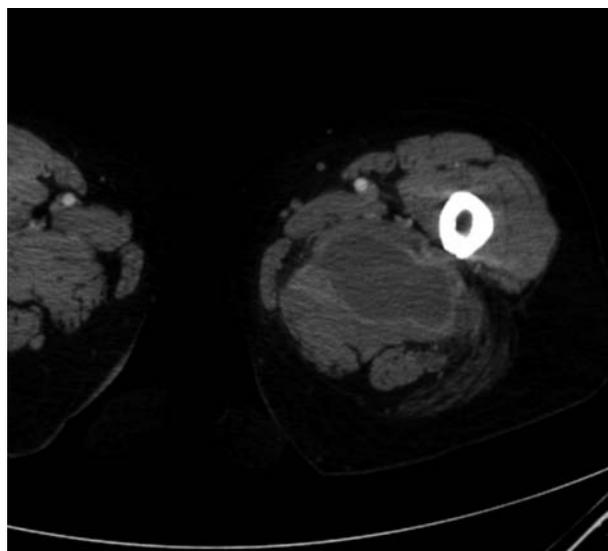


Figure 2. – CE-CT, 12 days post-op, prox. left upper leg, transverse.



Figure 3. – CE-CT, 12 days post-op, prox. left upper leg and pelvis, coronal.

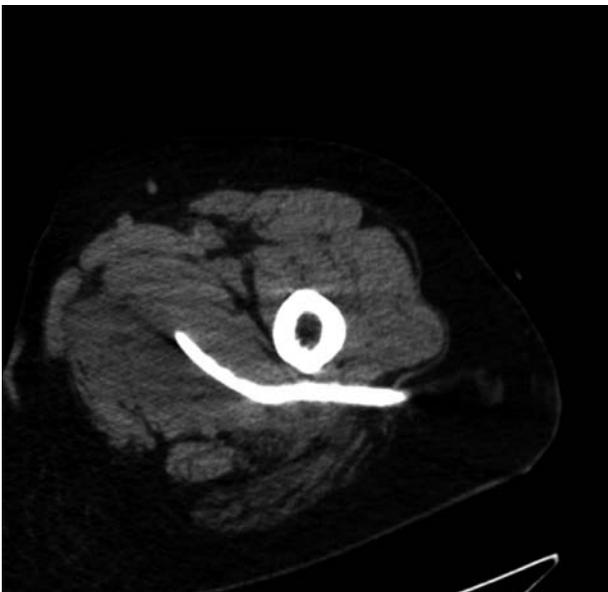


Figure 4. – CT-guided drainage, left upper leg.

After this local therapy the CE-CT-scan showed no residual abscess (Figure 5). The CRP was normal. Therefore we removed the drain and discharged the patient.

The follow-up examination 3 months later showed no residual abscess, the patient was pain-free, continent and satisfied with the result. In this case removing of the tape was not necessary.

#### DISCUSSION

Up to now there are no clear recommendations how to manage an abscess after TOT. In most cases the surgeon decides to remove the tape immediately and, if possible, completely in combination with debridement of the area. This procedure seems to be unavoidable if vaginal erosions exist.

In our case, the absence of erosion combined with an obturator abscess encouraged us to a local more conservative

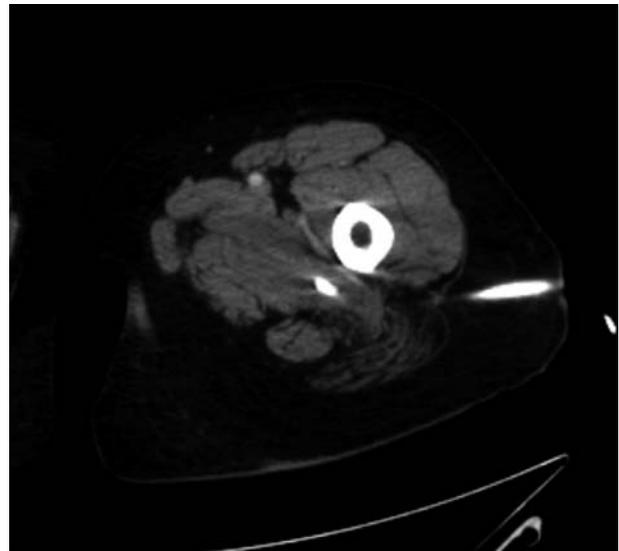


Figure 5. – CE-CT, after 8 days with drainage.

approach. Flushing out the adductor area with CT-guided drainage cured the patient without removing the tape. This shows that not in all situations a macroporous monofilament polypropylene tape or mesh has to be removed. But nevertheless it is not clear whether a remaining tape can induce bacterial infection later on.

#### CONCLUSION

When a suburethral tape has to be removed and a new sling is necessary, the safest way to prevent infections is to insert the new sling after an interval of at least three months. Following this rule we never have seen an infection in the past. As shown above in case of bacterial complications it is not always necessary to remove the tape.

The first diagnostic steps that are required are still clinical examination and findings, inflammatory blood values and ultrasound. In addition a contrast enhanced CT (CE-CT) can be very effective in detecting an abscess by showing the contrast-enhancing abscess membrane. Furthermore MRI and CE-MRI are suitable for diagnostics of soft- and connective tissue disorders. But they are also much more expensive methods which are not always available everywhere. Therefore they should be used secondarily in such cases that remain unclear after ultrasound and CE-CT.

Based on the diagnostic findings the surgeon has to decide individually about open surgery or an attempt with a guided drainage. Minimal invasive management seems to be safe enough, if the patient stays in hospital.

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