

SURGICAL ANATOMY OF OBTURATOR FORAMEN

Hypothesis / aims of study

The aim of the study was to know the anatomy of the Obturator Foramen and the relations of incontinence suburethral tension free slings as passing it.

One hypothesis was that the entrapment of the obturator nerve, which is an awkward issue, if the anatomy is known and understood can be minimized.

The other hypothesis was to recall the importance of the position of the patient while the technique is carried out to reduce risk of damage.

Study design, materials and methods

Dissection of the cadaver with and without incontinence tension free slings to know the structures involved in the passing of the slings can help us.

We first dissect the obturator foramen without slings inserted, in one side of the cadaver. Then we put the different slings which involved the obturator foramen, in both sides. After we continued with the dissection again in the side which was still complete, just to be aware of the difference between them.

We filmed the pass of the needles, thoroughly in the first dissected side, looking thoroughly at all the structures involved, including the obturator membrane, which is difficult to get a spatial vision.

Results

An extensive view of Obturator foramen, without slings were filmed. Also after inserting the slings, all the structures and the relationship with them were seen.

We realized the left leg of the cadaver was not perfectly placed, which is within 90-100°, and we found out that the obturator nerve was entrapped.

Interpretation of results

The knowledge of the Obturator Foramen anatomy and the relationship of the slings with the structures involved are crucial to be aware of the importance of following the steps designed to follow when placing an incontinence suburethral tension free sling. If the designed steps are not followed exactly, it's more likely to hurt important structures, which may cause trouble immediately (vessels, muscles,...) or later (nerve entrapment, pain, insensitivity, disesthesia,...).

The surgeon himself must be aware of the position of the cadaver while getting ready for the use of the slings, the assistant may be very competent, but the surgeon must check the position always.

So, both hypothesis were confirmed.

Concluding message

Main questions when using these slings:

- Knowledge of the anatomy
- Follow accurately the steps of each sling technique, which has been designed to elude damages of the tissues.
- Position of the patient is crucial not to entrap the Obturator Nerve, and must be checked by the surgeon himself.

Disclosures

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