

Purpose

In day-care surgery for hernia repair, failure due to insufficient analgesia is a common finding. Historically, we performed an ilio-inguinal block for better pain relief, unfortunately, this is often incomplete and operator dependent.

Three years ago, we modified our procedure by soaking the prosthetic material (Perifix Plug Bard®) in ropivacaine.

Methods

We did a retrospective analysis of patients who benefited from a hernia-repair in day-care surgery over a period of 48 months.

In the first year (group 1) an ilio-inguinal block was used. The last three years (group 2) the hernia prosthesis was soaked in ropivacaine (10mg/ml) before implantation.

Surgical technique and patients discharge criteria (fully recovered motor function, spontaneous voiding of the bladder and sufficient pain control: VAS<2) are identical.

Surgical results, reasons of failure of day-care surgery, and the quality of the postoperative analgesia was reviewed.

Results

98 patients underwent inguinal hernia repair in 4 years.

Age, gender and type of anesthesia used were equal in both groups.

The ilio-inguinal block requires 30 milliliters of local anaesthetic while the prosthesis Plug® retains only 2 milliliters when soaked.

Failure of day-care surgery related to pain (VAS>3) was less important in group 2.

There were no differences between the two groups concerning urinary blockage's occurrences.

No infection was found.

Conclusions

The impregnation of the Plug® with Ropivacain is a simple, effective and reproducible technique which allowed us to decrease the number of failed ambulatory hernia repairs. Doses of local anaesthetic used are 15 times smaller than those for the ilio-inguinal block.

Besides, ropivacaine has a documented bacteriostatic effect.