

LOCAL-INFILTRATION ANAESTHESIA FOR CLASSICAL VAGINAL RECONSTRUCTION

Hypothesis / aims of study

The purpose of the study presented was to evaluate our experience with classical surgical repair of advanced anterior vaginal prolapse using local anaesthesia.

Study design, materials and methods

Our retrospective study was performed as a pilot project for planned prospective setup. Since 2011 we have been using local anaesthesia under the antibiotics cover (Cefazolin 2 g) for the patients who agreed and signed the informed consent; thus two groups of patients were available: A) intravenous anaesthesia (n=24) and B) local anaesthesia (n=29). Articain with epinephrin in maximal daily dose diluted by saline was gradually applied into the urethro-vesicovaginal spaces and standardised method of surgery of anterior repair with respect to urethrovesical junction support was used.

Results

The median age of A group was 61.5 years whereas group B reached the median 68.9. The median follow-up period was 6.5 months (range 2-35). Median time of the operation was similar in both groups 58,8 vs 56,8 min (range 25-125) including all patients. The median time of urine derivation was A=1,7, B= 4,6, the duration of hospital sojourn was 4,16 and 4,53 days. There was no readmission, but 3 patients of A group were referred with suprapubic catheter obstruction and out of 5 complications of group B 2 were falls of old patients- 84, 88 years. There was no need to convert the performance to general anaesthesia.

Postoperative examination and interview of all our patients of group B revealed overall satisfaction with the local anaesthesia and recommended this approach to their colleagues in the Urogynaecological unit.

Detailed analysis of results of operations including urinary function, POP-Q changes, VAS scores and QoL questionnaires documenting perception of the intensity of pain during or after operation are ready for presentation[1].

Tab.1 Some of the demographic and clinical data

	age	risk (internal)	time (min)	deriv (days)	loss (mls)	opiates/0 (doses)	analg./0 (doses)	opiates/1 (doses)	analg./1 (doses)	release (days)
A	61,5	20,6 %	58,8	1,7	61,6	1,58	0,87	0,54	0,79	4,16
B	68,9	77,8 %	56,8	4,16	19,4	0,64	0,89	0,14	0,71	4,53

Interpretation of results

There is no significant difference between the groups concerning the BMI, duration of operation and the day of release from the hospitalisation. The difference in age between the groups can be explained by our efforts to persuade all elderly patients even if cognitively intact to choose local anaesthesia for their repair operation. Significantly better outcome concerning duration of postoperative urine derivation with Foley drainage than with epicystostomy (used in B group) was a surprise for us. Good news was the minimal blood loss with local anaesthesia. Epinephrine which is contained in the anaesthetic medium as a vasoconstrictor not only slows the absorption and, therefore, prolongs the action of the anaesthetic agent but its vasoconstricting abilities also help to diminish the total blood loss the patient sustains during surgical procedures. The doses of postoperative analgesics (in the contrary to our expectation) didn't increase. In the B group was the need for opiates even significantly lower than in general anaesthesia group whereas similar consumption of analgesics in both groups we attach to routine submission of these less addictive drugs in the post-operative period at our clinic.

Concluding message

In this retrospective study we analysed our so far experience with local infiltrative anaesthesia in surgical repair of advanced anterior vaginal prolapse with respect to the technique and appraisal by the patients.

Traditionally, local anaesthesia has been reserved for minor and superficial vaginal procedures. However, it can be successfully employed for extensive vaginal reconstructive surgeries. Duration of surgery didn't increase, blood loss was minimized and patient acceptance was excellent. The costs of hospital care with patients bypassing the recovery unit dropped. The future of this novel mode of reconstruction surgery is promising.

References

1. Rockett MP, Simpson G, Crossley R, Blowey S Characteristics of pain in hospitalized medical patients, surgical patients, and outpatients attending a painmanagement centre. Br J Anesth. 2013 Feb 18. Epub ahead of print

Disclosures

Funding: institutional own resources **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** The treatment and techniques of anaesthesia are used in our practice as one of standards **Helsinki:** Yes **Informed Consent:** Yes