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ELECTROSURGICAL GENERATORS WITH THE EFFECT OF TISSUE WELDING IN SURGERY TREATMENT OF HEMORRHOID

Ivanchov Pavlo,
Professor, Chief of surgery department

Peresh Yevhen,
Cand. Sc., assistant

Lissov Alexey,
Cand. Sc., associate professor

Sydorenko Victor,
Cand. Sc., associate professor

Prudnikova Oksana,
Assistant
Surgery department №3
O. Bogomolets National medical university
Kyiv, Ukraine

Introduction. Acute hemorrhoid is one of the most common diseases of the rectum (1-12). The proportion of the disease in the overall structure of rectal pathology is still 34-41%, affecting patients of working age (1,2,5,6,10,12).

Hemorrhoid not only leads to the temporary disability during exacerbations, but also significantly reduces the life quality (1-12). That's why, the issue of surgical treatment of hemorrhoids is still important today (1-12). No less relevant is the reduction of the cost of treatment and the intervention itself without reducing the radicality of the operation. For this purpose the use of modern surgical electric welding equipment for the hemorrhoidectomy has become more popular (3-12).

The aim of the work. To improve the results of surgical treatment of hemorrhoids by using different types of electrosurgical generators with the effect of tissue welding.

Materials and methods of research. The results of treatment of 81 patients with hemorrhoids of 2-4 stages for the period from 2016-2021, who were treated at the clinical bases of the Surgery Department №3 O.O. Bogomolets National Medical University, who underwent hemorrhoidectomy using electrosurgical generators with the effect of welding biological tissues (devices ALAN Elsy 360M +, Patonmed EKVZ-300, Liga Sure).

Results and discussion. Structure of patients by sex: among them were 45 (55,6%) women and 36 (44,4%) men. The mean age of patients was 37,2 years. In 27 (33.3%)

patients was a hemorrhoid of the 2 degree, in 48 (59,3%) - the 3 degree, in 6 (7,4%) - the 4 degree. All surgeries were performed in the operating room, under spinal or general anesthesia. No patient required any additional intraoperative hemostasis. The average duration of surgery was 17,4 minutes (ranging from 12 to 31 minutes). The length of stay in the hospital was 2-3 days, and the period of outpatient treatment – 12-21 days. The patients' ability to work was restored after 10-12 days. Only 5 (6,2%) of the all patients reported recurrent discomfort and itching in the rectum 4 weeks after surgery. The severity of the pain syndrome, assessed on a visual analog scale, averaged 3,7 points, which corresponds to slight pain or tolerable pain when moving. The most pronounced pain in patients was observed on day 3-4 of the postoperative period, which is probably due to the rejection of the coagulation scab from the wound surfaces during this period. In 5 (6,2%) patients in the postoperative period reflex urinary retention was noted. Long-term results in the period from 12 to 18 months were observed in 44 (54,3%) persons. Complete recovery and restoration of quality of life occurred in 42 (95,5%) patients. The reasons for unsatisfactory quality of life assessments in the other 2 (4,6%) persons were chronic constipation and were not directly related to surgery. We did not report a recurrence of the disease during this observation period in any patient. Narrowing of the anal canal was detected in 2 (4,5%) persons. Clinical symptoms and stenosis were completely eliminated by finger devulsion in combination with drug treatment.

Conclusions. Thus, hemorrhoidectomy performed using electrosurgical generators with the effect of tissue welding is a safe, effective and modern method of surgical treatment of hemorrhoids, which requires virtually no use of suture material. The application of the technique significantly reduces surgical blood loss, reduces the time of the operation and significantly reduces its cost.

The use of the method in acute bleeding hemorrhoids of stage 2-4 is promising, requires further analysis of the long-term results in order to compare them with other surgical procedures.

Keywords. Proctology, hemorrhoids, closed hemorrhoidectomy without sutures, complications of hemorrhoidectomy, electric tissue welding.

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