

## The role of VAC-therapy in accelerating the wound healing in patients after surgical treatment of the pilonidal disease



Galashokyan K M, Cherkasov M F, Startsev Y M, Cherkasov D M, Pomazkov A A and Melikova S H

Rostov State Medical University, Russia

### Abstract

**Objective:** Analyze of wound repair in patients with pilonidal disease with open wound management and stimulation of healing by VAC-therapy.

**Methods:** Study includes 75 patients who underwent open surgical treatment. Men were 59 (78.7%), women – 16 (21,3%). Patients were divided into main group (n=40), which after excision was carried out original vacuum therapy and control (n=35), with excision and open wound treatment by standart dressings. Clinical characteristics, cytological and planimetric parameters of healing were evaluated.

**Results:** In main group, during the first week of treatment, a decrease in inflammation was observed and by the second week – granulation tissue formation resulted in purification and epithelization of wound and by the third week of VAC-therapy were noted optimum conditions for wound contraction and scar tissue formation. At cytological examination, from the 8 day after the VAC-therapy, inflammatory response decreased in 33 (82.5%) patients, from 12 days in 13 (32.5%) patients' regenerative cytological pattern was determined. To 16 days in 24 (60.0%) observations of main group the wound regenerative processes were noted and in control one, inflammatory-regenerative cytograms prevailed – 21 (60.0%). In compared groups, it was found that average healing and wound area reduction rate for the first 16 days of treatment was significantly 2,7 times higher in main group.

**Conclusions:** Using VAC-therapy in postoperative wounds with open treatment of pilonidal disease promotes acceleration of healing and improves results of treatment in comparison using standard dressings.

### Biography

Galashokyan Karapet Melkonovich in 2017 defended his dissertation at the age of 29 at the Rostov State Medical University, The Russian Federation. He is an assistant in the Department of Surgery No. 4 of Rostov State Medical University, The Russian Federation, and currently works there. He has over 30 publications, which have been cited more than 13 times and his H-index – 2.

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