Operative treatment of pressure ulcers using pedicled flaps

Bielecki M. ¹ A-F, Bielecki P. ² A,D,E,F, Żebrowski P. ³ A,B,D,E, Misiak B. ^{4D,E,F}, Lewko J. ^{5D,E,F}

- Department of Orthopaedics and Traumatology Medical University of Bialystok, Poland
- 2. Department of Laryngology Medical University of Bialystok, Poland
- 3. Division Orthopedic Trauma Regional Hospital in Bialystok, Poland
- 4. University of Medical Science in Bialystok, Poland
- 5. Department of Integrated Medical Care, Medical University of Bialystok, Poland
- A- Conception and study design; **B** Collection of data; **C** Data analysis; **D** Writing the paper;
- $\hbox{\bf E- Review article; $\bf F$ Approval of the final version of the article; $\bf G$ Other (please specify)}$

ABSTRACT

Purpose: To present the results of surgical treatment concerning pressure ulcers.

Materials and methods: All patients underwent surgical treatment at the Orthopedics and Traumatology Clinic during the period of 1997-2016. The procedures were performed by one operator. A total of 28 pressure ulcers were operated (25 patients). The clinical material consisted of 15 pressure ulcers located in lower back area, 6 pressure ulcers located in the ischial area, three pressure ulcers located in the trochanteric area and four pressure ulcers located in the heel area.

Results: One conducted the result evaluation based on the criteria of complications proposed by Seiler. In case of all surgically treated patients, pressure ulcers appeared after 2-5 weeks after the surgery. One patient experienced hematoma below the slide piece. One could observe seroma in case of 5 patients. In this situation, it was required to apply a

local postoperative puncture. Four patients experienced marginal skin necrosis (2 of them required resection of dead skin edges in operating block conditions which were later re-stitched using "side to side" technique). During the 3-year follow-up, there was no recurrence of operated pressure ulcers.

Conclusions: Deep septic pressure ulcers, according to the division introduced by Seiler, connected with bone infection require the application of muscular-skin pieces. This procedure is aimed at improving local tissue blood supply. Proper preoperative preparation of the patient, careful planning of the surgery and suitable postoperative treatment of the patient are as significant as the surgery itself.

Keywords: Surgically treated pressure ulcers, lower back pressure ulcers, ischial pressure ulcers, heel pressure ulcers, pediculate pieces

DOI: