

## THE USE OF LATISSIMUS DORSI FLAP IN RECONSTRUCTION OF A MASSIVE SOFT TISSUE DEFECT AFTER ONCOLOGICAL ABLATION OF THE BACK

Anton Cezara, Stoian Alina, Fortuna Elvira, Mihaluța Viorica, Iordăchescu Rodica, Verega Grigore, State University of Medicine and Pharmacy “Nicolae Testemițeanu”, Clinic of Plastic Surgery, Aesthetic Surgery and Reconstructive Microsurgery, Chisinau, Republic of Moldova

**Introduction:** Ionizing radiation used in radiotherapy causes molecular changes both in cancerous cells and in healthy cells alike, sometimes leading to soft tissue ulcerations and necrosis which produces soft tissue defects that require reconstructive plastic surgery.

**Material and methods:** The study includes a clinical case of a 56 years old female patient who developed a keratinizing squamous cell carcinoma. After two rounds of radiotherapy and two soft tissue ablations, the patient was hospitalized in our clinic with a massive soft tissue defect on her back, where we performed secondary surgical debridement and defect reconstruction using a latissimus dorsi flap of 30 x 25 cm.



**Keywords:** latissimus dorsi, flap, defect, oncological

**Purpose:** The elucidation of a clinical case of reconstruction of a massive back defect that resulted after oncological ablation, using the latissimus dorsi flap.



**Results:** The donor site was partially closed in the first step of the surgery, and fully closed in a second step a week after, using a skin graft. The postoperative period presented itself without any vascular complications regarding both the flap and donor site. At the 45th postoperative day the patient fully recovered and returned to her usual lifestyle.

**Conclusions:** Radiotherapy related soft tissue defects present a challenge for reconstructive plastic surgery and the use of fasciocutaneous axially vascularized flaps offers high quality soft tissue for solving this problem.