## Amniotic membrane as a source of treatment in trophic ulcer of the lower limb.

Mihaluta Viorica<sup>1\*</sup>, Stoian Alina<sup>1</sup>, Verega Grigore<sup>1</sup>, Nacu Viorel<sup>2,3</sup>

<sup>1</sup>Clinic of Plastic, Aesthetic and Reconstructive Surgery, Orthopedics and Traumatology, University of Medicine and Pharmacy *Nicolae Testemitanu*, Chisinau, Republic of Moldova.

<sup>2</sup>Departement of Clinical Anatomy and Operative Surgery, University of Medicine and Pharmacy *Nicolae Testemitanu*, Chisinau, Republic of Moldova.

<sup>3</sup>Laboratory of Tissue Engineering and Cells Culture, University of Medicine and Pharmacy *Nicolae Testemitanu*, Chisinau, Republic of Moldova.

**Introduction.** Prolonged healing of lower extremity ulcers leads to their superinfection, followed by subsequent amputation of the limb. It is often seen in large chronic wounds with considerable tissue loss, which become senescent in the inflammatory process. In this case, the amniotic membrane is used as a biological dressing with a re-epithelialization effect.

**Material and methods.** For this research activity, the information was obtained by searching PubMed, using the following keywords: amniotic membrane, diabetic ulcer. The selected articles are in English and refer exclusively to the use of human amniotic membrane only in trophic ulcers of the lower limb. It includes an overview of the biologically active factors that induce the clinical effects that can be seen in amniotic membrane ulcers.

**Results.** Amniotic membrane allografts have been shown to be beneficial in the treatment of difficult to heal ulcers when was combined with standard therapy. Only through a meticulous initial evaluation of the wound is it possible to identify the factors contributing to its complexity. **Conclusions.** The amniotic membrane, by its properties, can promote the formation of granulation

tissue, with the suppression of excessive fibrosis, thus inducing the re-epithelialization of the chronic ulcer bed.

Keywords. amniotic membrane, diabetes, lower limb, ulcer.