

Summary

In dermatology, as in many other fields of medicine, we often have to deal with wounds and their healing. In the submitted study that is based on research carried out in the Department of Dermatology of the Military Hospital in Olomouc, Czech Republic we want to explore healing of chronic wounds, which represent a serious medical, social and economic problem.

We dealt with diagnosing, treatment and prevention of chronic wounds in connection with the application of the new wound dressing and various methods of treatment. The aim of this study is to summarize knowledge and experience gained with healing of chronic wounds, to draw the attention to the serious conditions of diabetic and neoplastic ulcerations as well as present new possibilities in the systemic therapy.

We carried out clinical examination and laboratory testing of the bio-active dressing influence on the chronic wounds markers production (MMP-2, MMP-9 a TNF- α) and on wound-healing. In laboratory testing we followed the sandwich ELISA method; during the clinical examination we evaluated the wound and its surrounding, the pain, microbiological colonisation and the contentedness with the therapy in the patients' and in the doctors' evaluations.

The dressing used positively influenced the character of the wound and its surrounding, its size, the pain and the tolerance of the material by the patients and their assessment of the effect of the therapy.

During the treatment we experienced a notable reduction of pathogens in the wound, and the balance between MMP-2, MMP-9 and TNF- α indicated wound-healing. Results of this research shall improve the development of a proteinase test in the Czech Republic.

In the clinical study where we locally used a preparation containing silver and hyaluronic acid we wanted to prove the benefits of the so called moist wound-healing. We monitored the size of the wound, microbiological population, and intensity of pain, tolerance of the preparation and the efficiency of the treatment. The study proved reduction of the size of the ulcers and even their complete healing in some cases. There was a substantial decrease in pain and infections.

The tolerance and efficiency was positively evaluated. Our assumptions proved to be true. The impact of the study is in broadening the possibilities of application of preparations with silver in wound healing in the common practice and in elimination of superstitions connected with silver.

We addressed the issue of wound healing and swellings and described cases from our practice. We accentuated the application of compressive treatment and physical therapy in most frequent varicose ulcers. We also described various interesting cases and experience with examination and treatment of ulceration resulting from diabetes or tumours. We pointed out the benefits of biologic treatment in chronic wounds and referred to our particular case history.

The approach to the patients should be complex and must respect the individuality of each patient. Only an exact diagnosis, precisely corresponding with the conditions and a consequent therapy together with preventive measures may lead to improvement of the quality of life of patients with chronic wounds.