USE OF SYNTHETIC FOAM DRESSINGS FOR THE WOUND CARE

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To my mother’s memory

- MOTTO: “He went to him and bandaged his wounds, pouring oil and wine ...”

ABSTRACT:

According to DORLAND’S ILLUSTRATED MEDICAL DICTIONARY 2003, debridement means “the removal of foreign material and devitalized or contaminated tissue from or adjacent to a traumatic or infected lesion, until surrounding healthy tissue is exposed”. The same work classifies debridement into 4 categories: a) natural spontaneous debridement (also called “physiological” either “autolytic”); b) passive debridement by different specialized dressings; c) enzymatic debridement; d) surgical debridement. This topic analyses all 4 categories listed above with all advantages and disadvantages of these methods, underling the passive debridement and that by polyurethane foam dressing especially. The last 3 methods already mentioned support and facilitate in fact the natural autolytic debridement process, every one having particular indication and benfit which should be adapted to each case. **No one of these methods is never considered to be a panacea which means that each one should be used when only the advantages are greater from a distance than the disadvantages.** Concerning the passive debridement by polyurethane foam (Ligasano), this one has all the advantages of “maggot therapy” with no one of its disadvantages, that is why we called this method “synthetic maggot therapy”. In short, the amazing effects of Ligasano PUR foam are due to the special structure and properties of this dressing which give particular qualities such as: a) “wound activation” by mechanical stimulation (micromassage) of the lesion surface and surrounding tissues improving the blood and nutrients supply of all area; b) decrease of pressure on the wound surface which facilitates collagen deposition and granulation; c) amazing suction power of exudates and debris, maintaining a permanent wet wound environment which improves autolytic debridement; d) improves the cost/efficiency ratio by avoiding expensive surgical techniques, decreasing the in-patient period and the frequency of dressing changes, and decreasing the total treatment cost as well by improving the social and professional reconnection of the most part of patients treated in this way. **These are some advantages of passive debridement, a complex treatment in which, according to the author’s experience, Ligasano PUR foam dressing has the most qualities.**

We used Ligasano dressings since 1999, in the Burn Centre & Plastic Surgery Dept., for the local treatment of difficult wounds such as very deep old neglected burns, extensive soft tissue infections, pressure sores, leg ulcers and so on. Ligasano foam is made from polyurethane with a
honey-comb special structure giving a remarkable local vascular “mechanical stimulus” combined with an amazing and singular suction power which cleans all wounds by a so called “passive debridement”, keeping in the same time a moist environment and thus facilitating the natural healing process. We used Ligasano white foam which is supplied in sheets of 50/50 cm and 0.5, 1 and 2 cm thick. All 3 thickness are very reliable for dressing the difficult wounds mentioned above, in a single layer or better multilayered in different combinations. The first layer has to outline the size and the shape of the wound and is covered by other 1-2 layers of foam which usually overlap by 1-2 cm the previous layer. Even though the supplier recommends to change this kind of dressing after a maximum of 3 days, we managed to keep the dressing in place for about 5-7 days (and sometimes even 2 weeks in less exuding wounds) with no side effects either modifications of the healing process, thus obtaining a very good cost/efficiency ratio. There is also a real decrease of the hospitalization period and costs because the healing process seems to be significantly shorter.

CONCLUSIONS:
Ligasano dressing is very useful for a great number of difficult wounds both in the office and in the hospital due to the following amazing qualities: stimulates blood circulation in the wound bed and the surrounding tissues; gives a very good elastic mechanical protection of the wound and the surrounding area; has an amazing suction power which cleans the wound of all debris, necrotic tissues, pus and exudates due to the so called “passive debridement”; has a very good cost/efficiency ratio due to rare need to change the dressing, the decrease of the hospitalization duration and the great number of cases treated in the office (thus keeping all social and professional connections for these patients and having a real benefit for active people especially).