

A plant derived Primary Wound Dressing containing oily extracts of Neem and Hypericum for the treatment of surgical wound dehiscences

Carnevali F. (DVM), Palombi M.(DM) , Di Venanzio M. (P), M. Altavista P. (DM) and van der Esch S.A. (B)

Aim: The purpose of this study is to determine the effectiveness of 1Primary Wound Dressing® (1PWD®) treatment for complete closure of SWDs (Surgical Wound Dehiscences).

Method: : 38 consecutive patients with SWDs, treated with iodine/iodoform based antiseptics, were subjected to 1PWD® treatment. Wounds were classified as either “stalled wounds” if TWP (Time of Wound Persistence) was >15 days (TWP-S group) or “normal wounds” if TWP was ≤15 days (TWP-N group). Impairments of wound healing (exposed bone, infection, etc.) correlating with increased wound severity, were considered (9/38). Primary outcome was defined as complete closure of the wounds and was expressed in days (Time To Heal, TTH); secondary outcomes were defined as Appearance of Granulation Tissue (**AGT**) on the wound bed and Appearance of the Epithelialisation from the Edges (**AEE**), both expressed in days. Descriptive statistics and Student's T-Test were performed.

Results / Discussion: 73.68% (28/38) (TWP-S group) had TWP: 52.89 (95% CI 32.62 - 73.16) days while 26.32% (10/38) (TWP-N group) had 11,70 (95% CI 8.08 - 15.32) days. None of the wounds showed presence of healthy granulation tissue at the first visit. After 1PWD® treatment, no significant differences between TWP-S and TWP-N groups were registered: AGT was 10.31 (8.32 - 12.31) days, AEE was 26.81 (21.35 - 32.28) days and TTH was 61.79 (41.85 – 81.73) days. The presence of impairments determined a prolonged AEE (P=0.001) and TTH (P=0.004). All wounds healed to complete closure without infective complications.

Conclusion: 1PWD® treatment restored the healing capacity to complete closure, preventing controversial antiseptics and infective complications.