

User Manual

Woulgan

Woulgan Bioactive Beta-Glucan Gel is a treatment for both acute and chronic wounds where wound healing is stalled, or is anticipated to heal slower than normal or is at high risk of becoming stalled. Woulgan has a unique formulation with gel properties and beta-glucan which reactivates stalled healing and accelerates the healing process^{1,2}. It is recommended to initiate Woulgan treatment after 4 weeks with standard care when the response is not satisfactory. It has been documented that a diabetic foot ulcer showing less than 40% size reduction in 4 weeks has a 91% risk of not healing in 12 weeks³. The initial healing rate of venous leg ulcers has also been shown to predict complete healing. A published algorithm suggests that <40% healing in 4 weeks indicates the risk of non-healing with conservative treatment⁴.

Indications

When wound healing is stalled or is anticipated to be slower than expected in:

- ◆ Diabetic foot ulcers
- ◆ Leg ulcers
- ◆ Pressure ulcers
- ◆ Open post-operative wounds
- ◆ Partial thickness burns
- ◆ Graft and donor sites
- ◆ Abrasions and lacerations



Wound conditions suitable for Woulgan treatment

- ◆ Dry to medium exuding.
- ◆ Partial to full thickness. Full thickness wounds might not heal with secondary intention.
- ◆ Fibrin – up to 75 % of the wound surface can be covered with dry or moist fibrin. The hydrogel properties will dissolve the fibrin.
- ◆ Necrosis – the wound can be covered with up to 75% yellow or black necrotic tissue. Before applying Woulgan debride according to local practice.
- ◆ Fistulas – Woulgan can be used in fistulas, although some fistulas will not heal without surgery.
- ◆ Tendons and bones can be exposed. Woulgan will not harm these structures, but when tendon and bone are visible, the wound might not heal with secondary intention.
- ◆ Undermining – can be present.

Precautions

- ◆ The effect of Woulgan might be reduced if the patient is treated with systemic steroids or immune suppressive treatment.
- ◆ Infection; a clinical infection should be treated according to local guidelines, but Woulgan can be used in conjunction with antimicrobial therapies.

Contraindication

- ◆ Known allergy to any of the components in Woulgan.

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How to apply

- ◆ Wound cleansing according to local practice
- ◆ Debride if appropriate
- ◆ Protect the wound edges, if applicable
- ◆ Cover the wound surface with a thin layer of Woulgan
- ◆ Apply a suitable secondary dressing of choice and fixate
 - Any foam dressing or wound contact layer can be used
 - Avoid using superabsorbent dressings
- ◆ Apply compression or offloading in indicated
- ◆ Apply new Woulgan at every dressing change
 - Typically, twice per week

Look for these clinical improvements:

- ◆ Cleaner wound bed
- ◆ Healthier wound tissue
- ◆ Smaller size
- ◆ Less depth

Treatment period

- ◆ Reassess after 4 weeks of Woulgan treatment and holistic patient care
- ◆ If none of the above improvements are seen, consider discontinuing Woulgan treatment
- ◆ When improvements are evident, continue for a second 4-week period or until healed. After 8 weeks treatment with Woulgan, assess healing and return to standard care if appropriate
- ◆ If the healing progression stalls or plateaus again, start another 4-week period of Woulgan treatment, assess and continue with Woulgan if improvements are seen
- ◆ If the wound deteriorates, the treatment should be discontinued. Assess possible reasons for deterioration; patient condition, clinical infection, changes in use of compression/offloading or changes in use of cleansing agents or cover dressings

Clinical observations when Woulgan is used

- ◆ An increase in signs of inflammation can be expected, do not confuse this with infection
- ◆ Sometimes an increase in exudate may occur after a few days

Woulgan is not:

- ◆ A biofilm remover
 - But Woulgan can be used after debridement and may prevent new biofilm formation
- ◆ A treatment for infected wounds, if the wound is clinically infected:
 - Treat the infection according to local practice
 - Woulgan may be used at the same time as long as exudate level is low to moderate

References:

1. *Can activation of body's own key cells in wound healing, wound macrophages, make a positive contribution in the treatment of chronic wounds?* Ingrid Skjævelend and Rolf E Engstad, SÅR, volume 21 no 4.
2. *Macrophage stimulating agent soluble yeast B-1,3/1,6-glucan as a topical treatment of diabetic foot and leg ulcers: A randomized, double blind, placebo-controlled phase II study.* Zykova et al, *Journal of Diabetes Investigation* Volume 5, Issue 4 2014.
3. *Sheehan P, Jones P, Giurini JM, et al. Percent changes in wound area of diabetic foot ulcers over a 4 week period is a robust predictor of complete healing in 12 week prospective trial.* *Plast. Reconstr Surg* 2006; 117(7 suppl): 239S-244S
4. *An evidence based algorithm for treating venous leg ulcers utilizing the Cochrane database of systematic reviews.* Howard M Kimmel et al. *WOUNDS*. 2013;25(9):242-250.