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Role of a topical hydrogel (Dermatix® wound care gel) in acute and chronic wound management: a case series of real-world experiences and expert opinion from Asia

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Role of a topical hydrogel (Dermatix® wound care gel) in acute and chronic wound management: a case series of real-world experiences and expert opinion from Asia

This article presents real-world experience and expert opinions from Asian clinicians regarding the use of **Dermatix® Wound Care (DWC) gel**, an acidified hydrogel, in managing diverse acute and chronic wounds.

Moist healing and modern dressings

The core principle of modern wound care is **moist healing**, which accelerates regeneration by:

- Maintaining optimal temperature and hydration.
- Regulating oxygen tension.
- Facilitating the breakdown of dead tissue.
- Supporting cell growth and migration.

Unlike traditional dressings (like gauze), which often lead to a dry environment and also adhere to wounds, modern dressings, including hydrogels, are preferred because they retain moisture and reduce adherence.

DWC Gel: a 'smart' hydrogel

DWC gel is an unmedicated, paraben-free, acidified hydrogel with a unique bifunctional action based on its carbomer component:

- In dry wounds, it acts as a moisture-retentive barrier, hydrating the wound bed.
- In wet/exudative wounds, it absorbs excess fluid.

This 'smart' activity helps maintain an optimal moist environment across various wound conditions. Its acidity also contributes to a lower wound pH, which may deter microbial growth. DWC gel also contains carnosine, a dipeptide that has been linked to accelerated wound healing through its anti-inflammatory and antioxidant properties.

Clinical case series and efficacy

A series of 16 cases of acute and chronic wounds, including **diabetic foot ulcers, pressure ulcers, venous ulcers, traumatic wounds and post-surgical incisions**, were treated with DWC gel, either alone or in combination with other therapies.

- **Acute wounds:** DWC gel alone promoted complete healing in superficial wounds with minimal scarring and good cosmetic outcomes. It was also successfully used alongside antibiotics for infected wounds.
- **Chronic wounds:** In hard-to-heal wounds, DWC gel, often combined with debridement, negative pressure wound therapy or other adjunctive treatments, showed significant improvement in granulation and epithelialization.
- **Patient experience:** Clinicians reported that patients found the gel easy to use at home, promoting **good**

adherence. It also appeared to provide a **cooling effect and pain/itch relief**.

Expert Consensus and future directions

An expert panel of dermatologists and surgeons agreed that DWC gel is a suitable option for:

- **Surgical wounds** (e.g., incisional).
- **Acute wounds** (e.g., abrasions, lacerations).
- **Chronic wounds** (e.g., diabetic wounds, pressure ulcers).

However, they advised against its immediate use on fresh surgical wounds (due to maceration risk) or infected wounds before the bioburden is addressed.

Key recommendations

- **Multimodal approach:** Chronic wounds require a **multidisciplinary approach** (utilizing the **TIMERS framework**) that addresses not just the wound but also underlying conditions and crucial **social and patient factors** (for example, adherence, socioeconomic status).
- **Further research:** Head-to-head trials comparing DWC gel to other hydrogels and further laboratory studies are needed to elucidate the anti-infective and anti-inflammatory roles of carnosine to strengthen the evidence base.

In conclusion, early real-world experience suggests that DWC gel is an effective and safe topical option that promotes granulation and epithelialization, fitting well into the management of various acute and chronic wounds, especially when used as part of a comprehensive care plan.