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Managing chronic venous disease: continuing role of zinc oxide paste bandages



Chronic venous disease (CVD) is a prevalent long-term condition associated with significant morbidity and healthcare input, particularly within community nursing services. It affects a substantial proportion of the adult population and is a leading cause of venous leg ulceration (Rabe et al, 2020). Venous leg ulcers represent up to 70% of chronic lower limb wounds and are commonly managed by community and tissue viability nurses (Guest et al, 2018). Healing is often prolonged, and recurrence rates remain high despite advances in compression systems and wound dressings.

Contemporary wound care offers a wide range of advanced dressing products designed to work locally by managing exudate, reducing bioburden and promoting healing. While these products deliver excellent properties at the wound site, their size limitation may mean that the remainder of the limb, specifically the widespread inflammatory skin changes characteristic of CVD, are not managed effectively. It is therefore important that both the wound and skin changes are fully assessed and treated. General care of the skin surrounding an ulcer is essential to maintain skin integrity and prevent further breakdown (Bianchi, 2012).

Zinc oxide paste bandages, Viscopaste and Ichthopaste, have a long heritage and historical use in venous disease management and continue to be recommended within

clinical practice (Parboteeah and Brown, 2008). Their sustained use over several decades reflects their ability to address skin inflammation, protect fragile tissue, and support effective treatment with compression therapy (Unna, 1896; Evolan Pharma AB, 2025).

This article explores the pathophysiology of CVD, the importance of managing venous eczema and skin inflammation, and the role of zinc oxide paste bandages, Viscopaste and Ichthopaste, as an adjunct to compression therapy. The discussion highlights the clinical effectiveness, practicality and relevance in modern nursing care of zinc oxide paste bandages.

CHRONIC VENOUS DISEASE AND SKIN PATHOLOGY

CVD results from sustained venous hypertension caused by valvular incompetence, venous obstruction, or impaired calf muscle pump function (Eberhardt and Raffetto, 2014). This leads to increased capillary permeability, oedema and the release of inflammatory mediators. Over time, these processes result in characteristic skin changes including venous eczema, hyperpigmentation, lipodermatosclerosis and ulceration (Parsi, 2007).

Venous eczema or stasis dermatitis is particularly problematic for many patients, presenting with erythema, scaling, weeping and intense pruritus. This can often impact the patient in terms of their mobility and overall quality of life (Lev-Tov et al, 2025). In addition to the potential for a negative self-

image, these symptoms of the skin may significantly reduce patient comfort and tolerance of prescribed compression therapy (Moffatt et al, 2007). The inflamed, fragile skin often becomes sore or painful, and exudate can cause dressings or clothing to stick, increasing distress, tissue trauma and the risk of further skin breakdown.

In the author's clinical experience, patients often report that damaged skin can frequently make compression therapy feel uncomfortable or even intolerable, particularly when bandages or stockings exacerbate itching, trap moisture and become malodorous. As a result, patients may be less willing or able to wear compression consistently, therefore reducing concordance with treatment and potentially delaying healing and long-term venous disease management (Ritchie, 2018). Effective nursing management therefore requires interventions that address both the underlying venous pathology and the inflammatory skin response (Moffatt et al, 2009).

ZINC OXIDE PASTE BANDAGES: COMPOSITION AND THERAPEUTIC EFFECTS

Zinc is important for many functions in the body including our immune function, growth, antibody production, tissue maintenance and wound healing. Levels of zinc within the body can be affected by age, i.e. older generations are more likely to develop hypozincaemia due to a poor diet, an age-related decline in absorption or being predisposed to conditions such as malignancy,

ICHTHOPASTE[◇] VISCOPASTE[◇] PB7 ZIPZOC[◇]

Zinc Oxide Paste Bandages - Trusted Wound and Skin Care for Your Patients

When the skins' integrity has been lost due to ulceration, chronic oedema or dermatological conditions, our zinc paste bandages and medicated stocking provide a protective barrier, reduce inflammation¹, and help to break the itch-scratch cycle². The application of topical zinc oxide helps to correct a local zinc deficit, soothing red and irritated skin, supporting re-epithelialisation¹.

When zinc oxide and ichthammol compounds are combined, improved healing rates may be achieved due to their antioxidant, anti-fungal and anti-bacterial properties¹²³.

Restore skin integrity using zinc oxide paste bandages or medicated stocking and help your patients to get on with their daily life.

Viscopaste
10% Zinc Oxide



Zipzoc
20% Zinc Oxide



Ichthopaste
6.32 % Zinc Oxide
2% Ichthammol



NHS Catalogue
Ichthopaste 7.5cm x 6m
Viscopaste 7.5cm x 6m
Zipzoc Stocking

Order Code
EFA 051
EFA 011
EFA 029

FP10 Drug Tarrif
Ichthopaste 7.5cm x 6m
Viscopaste 7.5cm x 6m
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ZIPZOC (zinc impregnated medicated stocking) **Abbreviated prescribing information.** Refer to summary of product characteristics before prescribing.

Composition: A sterile rayon stocking impregnated with an ointment containing 20% Zinc Oxide. Each stocking (80cm x 7cm) contains about 41.5g of ointment. **Therapeutic indications:** Aid to the treatment of chronic leg ulcers and other associated skin conditions. Where chronic venous insufficiency exists, the medicated stocking can be used as a primary contact layer under compression bandaging or hosiery. **Method of Administration:** Because ZIPZOC is preservative free, it must be changed no less frequently than weekly. For topical application, ZIPZOC should be applied to cover the lower leg from the base of the toes to below the knee. All folds should be smoothed out. To protect clothing, a suitable outer bandage should be worn. If chronic venous insufficiency exists, ZIPZOC may be used as a primary contact layer under compression therapy and may be left in situ for one week, before re-application. **Contra-indications:** Arterial leg ulcers. Known hypersensitivity to zinc oxide or the excipients in the ointment. **Special Warnings and Special Precautions:** None known. **Interactions:** None known. **Pregnancy and Lactation:** There is no evidence to suggest ZIPZOC should not be used during pregnancy. **Undesirable Effects:** The skin of leg ulcer patients is easily sensitised to some topical medications. ZIPZOC contains no preservatives thereby reducing the risk of skin reactions. Reported reactions include, rash, erythema, itching and maceration of the wound edge. If the outer bandage is inappropriate or the medicated stocking is not changed with sufficient frequency it can cause the stocking to dry out. **Excipients:** Liquid Paraffin Ph. Eur. White Soft Paraffin BP. **Incompatibilities:** None reported. **Shelf Life:** 3 years. **Storage:** At or below 30°C. Keep all medicines out of the reach of children. **Packaging:** Polyethylene aluminium foil laminated pouches, each pouch containing a single medicated stocking. The outer carton will contain either 4 or 10 pouches. **Legal Category:** P **Market authorization number:** PL44616/0002 **Date of first authorisation/renewal of the authorisation:** 01 October 2006 **Date of revision of text:** 26 October 2018 **Trade Mark of Evolan Pharma AB** **Date of preparation:** October 2018

chronic wounds, or dermatological conditions (Kogan et al, 2017).

Zinc oxide paste bandages are cotton bandages impregnated with an ointment containing zinc oxide; the products have a donatory effect onto the skin or wound. Zinc oxide has well recognised and documented anti-inflammatory, soothing, and mild antiseptic properties and therefore plays a vital role in epithelial repair (Lansdown et al, 2007).

Viscopaste Bandage contains 10% zinc oxide and is suitable for sensitive or inflamed skin. Ichthopaste Bandage has 6.32% zinc oxide and additionally contains ichthammol at 2%, which provides further anti-inflammatory and antimicrobial activity (Bickers and Lim, 2019). Ichthammol 2%, the shale oil-based ingredient in Ichthopaste Bandage, possesses antibacterial, antimycotic, and antipruriginous actions (Gayko et al, 2000), and is therefore useful in treating wet, itchy eczema and other skin conditions such as dermatitis and hyperkeratosis, helping to break the itch-scratch cycle (Boyd, 2010).

When applied beneath compression systems, both Viscopaste and Ichthopaste zinc oxide paste bandages act as a soothing and comfortable protective interface layer, reducing dryness and irritation, absorbing mild exudate, and maintaining a moist environment conducive to healing (Todhunter, 2018).



Figure 1.
Placement of zinc oxide paste bandage prior to compression therapy.

Table 1: Comparison of Viscopaste and Ichthopaste

Feature	Viscopaste	Ichthopaste
Key ingredients	Zinc oxide	Zinc oxide and ichthammol
Primary action	Soothing, protective	Anti-inflammatory, antimicrobial, antifungal
Typical indications	Venous eczema, sensitive skin	Inflamed, lichenified or weeping eczema
Odour	Minimal	Characteristic ichthammol odour
Patient tolerance	Generally high	May be reduced in some patients

ZINC OXIDE PASTE BANDAGES IN THE CONTEXT OF MODERN WOUND CARE

In the author’s clinical experience, advanced wound dressings, such as foams, alginates and antimicrobial products, play an essential role in managing complex wounds. However, these dressings are typically designed for localised wound coverage rather than widespread skin involvement.

Zinc oxide paste bandages are particularly useful where venous eczema and dermatitis extend beyond the ulcer margins or where skin inflammation threatens healing. They are commonly used during acute inflammatory flare-ups, as a protective layer following ulcer healing or in patients with recurrent dermatitis (O’Meara et al, 2012).

Where there are chronically lichenified conditions of the skin, such as hyperkeratosis, Ichthopaste Bandage is a useful tool in the healing journey, as the ichthammol is derived from dark sulfonated shale oil and leaves a layer of oil on the skin, preventing loss of moisture and softening troublesome skin plaques (Ichthyol-Gesellschaft, 2025). In the author’s clinical experience, the low cost of both zinc oxide paste bandages and their ease of application make them especially valuable in community settings with limited resources.

SUPPORTING COMPRESSION THERAPY AND PATIENT ADHERENCE

Compression therapy remains the cornerstone of CVD management

(Wounds UK, 2015). However, discomfort, itching, and skin irritation are common barriers to adherence. Research has highlighted that zinc-impregnated bandages have been in use since 1854, and their modern-day equivalents, such as Viscopaste and Ichthopaste, are still one of the main treatments for venous leg ulcers in conjunction with compression therapy (Parboteeah and Brown, 2008).

In 2006, Beckert et al claimed that a randomised, controlled, observer-blind, multicentre study demonstrated that Ichthammol can favour venous ulcer healing beyond compression therapy alone. Additionally, Beckert et al (2006) stated that ichthammol was safe and well tolerated by patients, and therefore should be considered for future wound care protocols in the treatment of chronic venous leg ulcers. This would suggest that bandages like Viscopaste and Ichthopaste, which contain zinc oxide and ichthammol, could not only significantly improve healing (Agren, 1990; Lansdown et al, 2007; Pasquet et al, 2014; Kogan et al, 2017), but also increase tolerance of compression therapy by promoting patient comfort and reducing inflammation and pruritus.

Nurses play a crucial role in assessing skin conditions (Moffatt et al, 2007), selecting appropriate zinc oxide paste products, and educating patients about their purpose. Individualised product choice, such as selecting Viscopaste for sensitive skin or Ichthopaste for pronounced inflammation, supports person-centred care and improved outcomes.

CONCLUSION

Despite significant advances in wound care technology, it is clear that zinc oxide paste bandages continue to play an important role in the nursing management of patients with chronic venous disease and other dermatological conditions (Evolan Pharma AB, 2026). Their ability to protect fragile skin, reduce inflammation, and support compression therapy makes them particularly valuable in community nursing settings and in tissue viability practice. Viscopaste and Ichthopaste Bandages exemplify how well established, low-technology interventions remain clinically relevant and effective when used as part of holistic, patient-centred care.

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KEY POINTS

- Chronic venous disease frequently involves inflammatory skin changes that require active management alongside ulcer care.
- Zinc oxide paste bandages provide lower limb skin protection, reduce inflammation, and support healing in venous eczema.
- Viscopaste and Ichthopaste Bandages serve distinct but complementary roles in managing inflamed or sensitive skin.
- Zinc oxide paste bandages act as a soothing, effective interface layer beneath compression therapy.
- Improved skin comfort can enhance patient adherence to compression, improving long-term outcomes.
- Viscopaste and Ichthopaste Bandages exemplify how well established, low-technology interventions remain clinically relevant and effective.

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Table 2: Nursing considerations for using zinc oxide paste bandages

Consideration	Nursing implications
Skin assessment	▶ Identify eczema, dermatitis, exudate, and sensitivity
Product selection	▶ Match the bandage type to the skin condition(s)
Application technique	▶ Pleating the bandage or cutting strips dependent on wound and skin
Patient education	▶ Explain their purpose and expected sensations to the patient or carer
Monitoring	▶ Review skin response and tolerance regularly