Burnsil®

(Silver Sulfadiazine Cream)

Description

Burnsil cream is a soft white cream containing Silver Sulphadiazine 1% USP. Burnsil (Silver Sulphadiazine) is a local chemotherapeutic agent for prevention and treatment of burn wound infections. Silver Sulphadiazine disintegrates in the burn wound, thereby causing a slow and sustained release of silver ions. Silver ions bind to bacterial Deoxyribonucleic acid (DNA), thus inhibiting the growth and multiplication of bacterial cells without affecting the cells of the skin and subcutaneous tissue. Burnsil cream has a broad antibacterial spectrum including virtually all microbial species likely to infect the burn wound : *Escherichia coli*, *Pseudomonas aeruginosa*, *Staphylococcus aureus*, strains of Proteus and Klebsiella. It is also an effective agent against *Candida albicans* and other fungi. Burnsil penetrates into the necrotic tissue and exudate. This effect is very important in view of the fact that systemic antibiotics are not effective against the bacterial flora of vascular burn necrosis.

Indications

Prophylaxis and treatment of infection in burn wounds

- *As an adjunct to short-term treatment of infection in*
  - a. Leg ulcers
  - b. Pressure sores
- *As an adjunct to prophylaxis of infection in*
  - a. Skin graft donor sites
  - b. Extensive abrasions
- *Conservative management of Finger-tip injuries*

Dosage and Administration

Burns : Keep the burn wound in clean condition and apply Burnsil over the affected area to a depth of 3-5 mm. This application is best achieved with a sterile gloved hand and/or a sterile spatula. Where necessary, the cream should be re-applied to any area from which it has been removed by patient activity. In burns, Burnsil should be re-applied at least every 24 hours, or more frequently if the volume of exudate is large.

Hand burns : Apply Burnsil to the burn area and enclose with a clean plastic bag or glove upto wrist. The patient should be encouraged to move the hand and fingers. The dressing should be changed when an excessive amount of exudate has accumulated in the bag.

Leg ulcers/pressure sores : The cavity of ulcer should be filled with Burnsil to a depth of at least 3-5mm. As Burnsil can cause maceration of normal skin on prolonged contact, care should be taken to prevent spread on the non-ulcerated areas. Application of Burnsil should be followed by an absorbed pad or gauze dressing, with further application of pressure bandaging as appropriate for the ulcer. The dressings should normally be changed daily but for wounds which are less exudative, less frequent changes (every 48 hours) may be acceptable. Cleanings and debriding should be performed before application of Burnsil. Burnsil is not recommended for use in leg or pressure ulcer that is very exudative.

Fingertip injuries : Haemostasis of the injury should be achieved prior to the application of a 3-5 mm layer of Burnsil . A conventional finger dressing may be used. Alternatively waterproof adhesive tape can be used on finger covered by a plastic or surgical glove. Dressings should be changed every 2-3 days.

Contraindications

The use of Burnsil is contraindicated in premature infants and neonates because of possible kernicterus. It should not be used in pregnancy, except in cases when the potentially life-saving benefits of the medication outweigh possible hazards to the foetus.

Precautions

Caution is required in the presence of hypersensitivity to Sulphonamides because of possible allergic reactions, in patients with inborn glucose-6-phosphate dehydrogenase deficiency, as haemolysis may occur after the application of the cream to the large body surface area; as well as in the presence of hepatic and renal dysfunction.When treatment with Burnsil cream involves prolonged administration or large burn surfaces, the white blood cell count should be monitored, as leukopenia may occur.

Warning : Elevation of body temperature occurring in children during the first days of treatment is unrelated to Burnsil administration and should not lead to the discontinuation of therapy.

Side Effects

In prolonged treatment of burn wounds involving extensive areas of the body the serum Sulphonamide concentrations may approach the levels equal to those in systemic treatment.

Use in Special Population

Pregnancy : As Sulphonamide therapy is known to increase the possibility of kernicterus, Silver Sulphadiazine 1% cream should not be used on pregnant women approaching or at term.

Infant : The cream should not be used on premature infants, or on newborn infants during the first 2 months of life.

Commercial Pack

Burnsil® Cream : Tube containing 25 g of cream. Each gram of cream contains Silver Sulphadiazine USP 10 mg.