Cothivet

Wound cleaner & bitter spray
Phytopharmaceutical product
Cothivet

- Phytopharmaceutical product for external use
- Cicatrizer and antiseptic
- For wounds of any origin and any localisation
- For all species (including the cat)
Cothivet

- 4 essential oils and 4 mother tinctures
- **Essential oil**: 
  - Essenses are products of a rather complex composition containing the volatile principles in plants.
  - Generally a volatile oil is obtained by distillation of natural aromatic substances of vegetal origin
Cothivet

• **Mother tinctures:**
  – Liquid preparations dissolved in a alcoholic vehicle or oil vehicle of vegetal or animal origin.

  – These tinctures are frequently used in pharmacy and are presented at maximum concentration
Composition of Cothivet

• 8 plant extracts
  – Hydrocotyle (Centella Asiatica) (m.t.) 89.5 %
  – Lavandula officinalis (essential oil) 5.8 %
  – Rosmarinus officinalis (essential oil) 1.5 %
  – Aesculus hyppocastanum (m.t.) 1.2 %
  – Thymus officinalis (essential oil) 0.9 %
  – Cupressus officinalis (essential oil) 0.8 %
  – Medicago sativa (mother tincture) 0.16 %
  – Carlina acaulis (mother tincture) 0.14 %
Composition of Cothivet

1. **Hydrocotyle (Centella Asiatica)**
   - Is the main constituent of Cothivet
   - The plant grow in the tropical region
   - The leaves and the whole plant is used
   - The essential actives are triterpene deverivates mainly **asiaticoside**, an ester which following hydrolysis release asiatic acid; glucose and rhamnose
   - Hydrocotyle extract increases bloodflow and stimulates the reticulo-histiocytary system
   - Asiaticoside has a cicatrizing effect
Composition of Cothivet

• 2. Lavender (Lavandula officinalis)
  – Plant of the labiae family
  – Only the flowers are used
  – The essential oil contains terpene derivates (carbides and alcohols)
  – A concentration of 4.5% essence kills staphyloccci
  – Its **antiseptic action** improves the **cicatrization** of wounds with a necrotic centre
Composition of Cothivet

• 3. **Rosemary (Rosmarinus officinalis)**
  – Plant of the labiae family
  – The flowers and the leaves are used
  – The essential oil contains terpene derivates, flavone pigments, rosmarinic acid and carnosol

  – **Cicatrizing and antiseptic properties**
Composition of Cothivet

4. **Horse chestnut (Aesculus hippocastarum)**
   - The mother tincture contains triterpene saponosides mainly aescin, flavone derivates, tannin and D. catechol
   - The seeds and the bark is used

   - Aiscin exerts **anti-inflammatory action**
Composition of Cothivet

• 5. **Thyme (Thymus officinalis)**
  – Family of labiates
  – The flowers and the leaves and seeds are used
  – The essential oil contains phenols (thymol) and terpene derivates

  – Used due to its **antiseptic properties**
Composition of Cothivet

• 6. Cypress (Cupressus officinalis)
  – The fruit is used
  – The essential oil contains camphor, D-pinene, cadinene, cedrol, and catechin tannin
  – Powerfull vasoconstrictor and astringent action
Composition of Cothivet

7. **Lucerne (Medicago sativa)**
   - Family of leguminous plants
   - The whole plant is used
   - The mother tincture is rich in mineral (calcium, potassium, phosphorus and iron) and vitamins (carotene = provitamin A, vitamins: C, D, E, K₁)
   - The oil exerts an **antihaemorrhagic action and stimulates calcification**
Composition of Cothivet

• 8. **Carlina (Carlina acoulis)**
  – Family of composite plants
  – The roots are used
  – The mother tincture contains inulin, tannin, coulinene-containing essential oil and an acetylene derivative, carline oxide

  – **Antibacterial properties** against staphylococci and other gram-positive bacteria
Experimental trial with Cothivet

Healing of experimental cutaneous wounds infected with staphylococci in rats
Cicatrizing effect

Electron microscopy of Cothivet treated skin show increase in number, changes in shape and size of keratoxyaline granules compared to control specimens.

These changes are normally observed during keratinization of wounds with accelerated healing.
Action of Cothivet

• Examining the pharmaceutical properties of each of the constituents of Cothivet shows that the dominant pharmacological and therapeutic action is:
  – **Cicatrizing effect**
  – **Antiseptic properties**
Action of Cothivet

• Other properties
  – Anti-inflammatory
  – Vasoconstrictor
  – Vitamin properties
  – Antihaemorrhagic properties

• In conclusion: Cothivet is a powerful cicatrizing, antiseptic, phytopharmaceutical product for external use
Use of Cothivet

• Dosage
  – Apply 3 to 4 per day; pulverise directly over the wound

• Presentation
  – 100 ml: 700 sprays
  – 30 ml: 200 sprays
Use of Cothivet in wounds with major loss of tissue

Cothivet uses in pets

• Used in a dog with **ulcerations on all footpads**. Many treatments had been used without success (including bandages). I had Cothivet applied 4 times a day and by the end of the week, most foot pads showed granulation. Two weeks later, everything had healed.

• **Doctor Nadine Bérubé, Magog Quebec**
Cothivet uses in pets

• Used after **every surgical closure**. The healing process is very nice. Cothivet decreases the edema formation and reduces the discomfort.

• **Doctor Radh-Mihai Mirescu**, Stonewall, Manitoba
Cothivet uses in pets

• Used for 10 days to treat **licking granuloma** on the forelimb of a dog. Had received many corticosteroid-based treatments but without success. The animal stopped licking itself after the first application. The taste and the odor of the product cut the vicious cycle of the licking. After three days there was already an improvement.

• **Doctor Blaise St-Louis, St-Antoine, Quebec**
Clinical case report
Five year old French saddle mare

Photo's taking (1996) R. Pelequin DVM, Savigny-sur-Braye, France
Clinical case report
Five year old French saddle mare

• Injured by barbed wire during thunder storm
• Surgical trimming and stitches and antibiotics + anti-inflammatory therapy for 4 days
• Development of gangrene after 1 week with substantial loss of tissue.
• Change of strategy to fit a slow healing process with antibiotics universally for a period and Cothivet spray 4 to 5 times daily until healing
Clinical case report
Five year old French saddle mare

Conclusion: The significant improvement in wound healing was in part attributable to the multiple application of Cothivet
Indications for Cothivet

- Bites (dogs and cats)
- Accidental burns by heat, frost or chemical
- Ulcerous wounds (all species)
- Wounds which are kept open due to licking (dogs)
- Wounds on teats or the udder (cows and sheep)
- Coronary cracks of the hoof (horses)
- Surgical wound closed with sutures (all species)
- Cracks or wounds on the footpads (dogs and cats)
- For all Hard-to-Heal Wounds (all species)
Positioning of Cothivet

• **First aid wound treatment**
  – Spray, easy to use even during frost
  – Do not stain or discolour the wound
  – Very good smell (parfume for wounds)
  – Excellent tolerance in all species
  – Dry up the wound (minimizing attraction to flies)
  – Non irritating product
  – Not toxic (licking the product has no side effects)
  – No withdrawal period
  – Good stability
Clinical efficacy Cothivet

• Clinical efficacy
  – (1) Photo serie, equine (1996) R. Pelequin
  – Cheval désabotté
  – (3) Clinical cases, dog (1997) P. Vinclair & K. Vaysset:
    “L’efficacité de la préparation Cothivet appliquée au
    traitement des plais chez le chien de traineau”; Action
    Vétérinaire, no 1404 du 30 Mai 97, pp 13-16.
Clinical efficacy Cothivet


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