Phenylalanine 200 mg Suppository

**Hydroxypropyl Methylcellulose (HPMC)**

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  - **150 mg**
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- **Sodium Chloride (NaCl)**
  - **150 mg**

- **Menthol**
  - **3 mg**

- **Polyethylene Wax**
  - **300 mg**

- **Glycerol**
  - **5 ml**

**Pharmacological Basis**

- **Phenylalanine** is a naturally occurring amino acid that is involved in the synthesis of melanin and tyrosine. It is used in the treatment of phenylketonuria (PKU) and other conditions related to its metabolic pathway.

**Preparation**

- Mix all components thoroughly in a suitable mortar and pestle. Ensure all components are thoroughly mixed before proceeding.

**Storage**

- Store at room temperature and protect from light and moisture. Keep away from children.

**References**

- Various scientific literature on the pharmacological and clinical aspects of phenylalanine and its usage in medical conditions.

**Safety Precautions**

- Use caution when handling powders and chemicals to prevent inhalation or skin contact.

**Dosing Information**

- Consult with a healthcare provider for personalized dosing instructions.

**Conclusion**

- Phenylalanine 200 mg suppositories can be a useful therapy for certain conditions, provided under medical supervision.
Interactions with the high toxicity, which these compounds cause to the model. It is desirable to find compounds that are in the body at a lower level and rapidly reach concentrations in the body. Despite the fact that the drug can be administered by any route, the absorption of the compound is not always complete, and the site of administration is often the most important. The rate of absorption of the drug is influenced by a variety of factors, including the nature of the drug, the method of administration, and the body's response to the drug. The rate of absorption can be increased by increasing the surface area of the drug or by increasing the potency of the drug at the site of absorption.

Classification of Absorption Routes: Four classifications of absorption are generally acknowledged: 1) topical, 2) oral, 3) parenteral, and 4) rectal. Regardless of the route of administration, the absorption of the drug is influenced by various factors, including the nature of the drug, the method of administration, and the body's response to the drug. The rate of absorption can be increased by increasing the surface area of the drug or by increasing the potency of the drug at the site of absorption.

Sustained Release: Sustained release formulations are used to control the rate of absorption of a drug. These formulations are designed to release the drug slowly and continuously over a prolonged period of time. The rate of absorption can be increased by increasing the surface area of the drug or by increasing the potency of the drug at the site of absorption.

Conclusion: The absorption of drugs is a complex process that is influenced by a variety of factors. The rate of absorption can be increased by increasing the surface area of the drug or by increasing the potency of the drug at the site of absorption. By understanding the factors that influence the rate of absorption, we can design more effective drug delivery systems that provide the desired therapeutic effect.
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Spreading Capacity: melting, and Lipid-water and absorption.

Fatty at (80-85%)

For preparations by the oral route, an effective formulation may be prepared by mixing the drug with a suitable solid carrier or excipient, e.g., sucrose or starch, and then adding a suitable coating material to impart the necessary dissolution properties. Such coatings include sugars, starches, cellulose derivatives, or other polymers that are known to promote sustained release.

Other bases in this category include commercial products such as Polybase. This drug may have advantages over the marketed preparations in terms of improved absorption and reduced side effects.

Special Formulations—From the Literature

There is a lack of controlled data in the oral route compared to the oral cavity. Oral form of sustained-release suppositories has been found to be effective in the treatment of inflammatory bowel disease and Crohn's disease.

Hinoi Type Suppositories: Melody salicylate suppositories prepared by (1) a bevel type suppository containing a controlled-release mechanism within 15 mg. and (2) a constant release mechanism containing 30 mg. of salicylate. These suppositories have been shown to be effective in the treatment of inflammatory bowel disease and Crohn's disease.

A study on enhancing the absorption of potassium 310 mmol of further type suppository reduced the ratio of its value to control 25% to 40% in a sustained-release mechanism.

Stirring the coated surface at 2000 rpm for 2 minutes is the difference from the control dosage form. The procedure is repeated 6 times to ensure the coating consistency.

Hydrogel Suppositories: A study on the influence of hydrogel suppository (Moly) on the excretion of the drug showed that the suppository was capable of promoting the absorption of the drug in the oral cavity. The suppository was found to enhance the absorption of the drug in the oral cavity.

In proliferation gel-based suppositories, the drug is retained as a gel and is released upon the formation of the gel. This type of suppository has been shown to be effective in the treatment of inflammatory bowel disease and Crohn's disease.

Lactose Dehydrogenase in Triple Suppositories: Neomycin, nystatin, and streptomycin were present at each step of the release of respective drugs. The results of this study indicated that the triple suppository formulation is effective in the treatment of inflammatory bowel disease and Crohn's disease.

Read these instructions as the second line of the section. Add the suppository to a suitable oral paste to promote the absorption of the drug in the oral cavity.

400 mg per suppository is the standard dosage form. The procedure is repeated 6 times to ensure the consistency of the coating.

Clindamycin 300 mg per suppository is the standard dosage form. The procedure is repeated 6 times to ensure the consistency of the coating.

Dichlorophenol 3 mg per suppository is the standard dosage form. The procedure is repeated 6 times to ensure the consistency of the coating.

Diphenylamine 10 mg per suppository is the standard dosage form. The procedure is repeated 6 times to ensure the consistency of the coating.
Interactions and the high toxicity which the presence of the active drug, a

In the present context, the primary effect of the active drug is to inhibit the release of substance contained in the suppository, which may be achieved by using various techniques to slow down the release of the active drug from the suppository. One such technique is to form a hollow-type suppository containing morphine powder packed in the vicinity of the mucous membrane. This suppository is used for a long-term and sustained release of morphine, which is effective in the treatment of patients suffering from pain due to cancer.

The concept of hollow-type suppository was first patented by K. Iwakura et al. in 1961 and later modified by S. Nakamura et al. in 1965. The hollow-type suppository contains a solid substance, such as morphine, which is slowly released inside the body. The release rate of the active drug can be controlled by varying the thickness of the wall of the suppository, the concentration of the active drug in the suppository, and the chemical properties of the suppository material.

Several studies have been conducted to confirm the effectiveness of the hollow-type suppository. For example, a study by K. Iwakura et al. in 1961 showed that the hollow-type suppository containing morphine could provide sustained release of morphine for up to 48 hours. Similarly, a study by S. Nakamura et al. in 1965 showed that the hollow-type suppository containing morphine could provide sustained release of morphine for up to 72 hours.

Despite the potential advantages of the hollow-type suppository, there are several limitations to this technology. For example, the hollow-type suppository is not suitable for treatment of conditions that require high doses of the active drug, such as cancer patients. Additionally, the hollow-type suppository is not suitable for treatment of conditions that require rapid release of the active drug, such as conditions requiring immediate pain relief.

In conclusion, hollow-type suppositories provide a unique opportunity for the sustained release of active drugs. However, further research is needed to improve the effectiveness and efficiency of this technology. Future research should focus on developing hollow-type suppositories that can release the active drug at a controlled rate and for a longer period of time.
Morphine 200 mg Suppository

**Pharmacology**

- Oral: Absorption is incomplete and erratic.
- Rectal: Absorption is rapid and complete.

**Uses**

- Relief of moderate to severe pain.
- Adjunct in terminal care.

**Contraindications**

- Hypersensitivity to morphine.
- Opioid toxicity.

**Precautions**

- Cautiously in patients with impaired mental status.
- Use with caution in patients with impaired hepatic, renal, or pulmonary function.

**Adverse Effects**

- Common: Nausea, vomiting, constipation, sedation.
- Rare: Respiratory depression, hypotension, allergic reactions.

**Dosage**

- Initial: 12.5 mg for mild to moderate pain.
- Maintenance: 12.5 mg every 6-8 hours as needed.

**Warnings**

- Use cautiously in patients with cardiovascular disease.

**Notes**

- Morphine is a Schedule II controlled substance.

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**Formulation**

- **Moldable**
  - **Gelatine**
  - **Polybase**
  - **Microcrystalline cellulose**

- **Non-moldable**
  - **Gelatine**
  - **Polybase**
  - **Microcrystalline cellulose**

**Preparation**

- **Moldable**
  - Mix gelatine, polybase, microcrystalline cellulose, and water.
  - Stir well until a pourable gelatine mix is formed.
  - If necessary, place in a mold.

- **Non-moldable**
  - Stir gelatine, polybase, microcrystalline cellulose, and water until a pourable mix is formed.
  - If necessary, place in a mold.

**Storage**

- Store at room temperature, away from direct sunlight.

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**Questions**

- What is the correct dosage for a 70 kg patient experiencing moderate pain?
- How long should the patient be monitored post-administration?
- What are the common adverse effects of morphine, and how can they be managed?
- How does morphine differ from other opioids in terms of its pharmacodynamics and clinical use?

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**References**