

Preparation of ointments

Ointments can be prepared by two methods :

1. Trituration method
2. Fusion method

1. Trituration method

Powder the medicament if already not in fine powder. Triturate it with a small amount of base on an ointment slab with a stainless steel spatula with long blade. Incorporate this to the rest of the base with thorough trituration until uniform. If liquids are also to be incorporated, pestle and mortar should be used for the purpose.

2. Fusion method

When an ointment base contains a number of solid substances, melt them in decreasing order of their melting points to avoid over-heating of low melting point substances. Add the medicament to the melted bases and stir thoroughly until the mass cools down and a homogeneous product is formed.

If any liquid or aqueous substance is also to be incorporated, that must be heated to about the same temperature as the melted bases. After mixing the two portions they should be stirred uniformly and thoroughly until a homogeneous mass is obtained. Rapid cooling should be avoided.

Creams

Creams are thought of as ointments but usually contain a water soluble base due to which they can be easily removed from the skin. They are of softer consistency and have a lighter body than true ointments. When applied to the skin, creams leave no visible evidence of their presence on the skin.

Pastes

Pastes are the semi-solid preparations meant for external application to the skin. They differ from ointments that they generally contain a large amount of finely powdered solids such as starch, zinc oxide, calcium carbonate etc. They are quite thick and stiff than ointments but are less greasy than ointments.

Packing

Ointments, creams and pastes should be packed in ointment jars or collapsible tubes. They should be labelled with good quality of paper and adhesive. The label should be attached to the collapsible tubes towards the top because during use the tube is rolled up and this will prevent the spoilage of the label until the tube is practically empty. A secondary label "for external use only" must be attached.

Exercise No. 58

For :

Age :

Address :

Rx

Benzoin, crushed	10 gm
Prepared storax	5 gm
Alcohol (95 per cent)	to 100 ml

Label : The inhalation. Send 50 ml.

Direction : Put one teaspoonful to hot water (about 65°C) and inhale the vapours.

Type : Inhalation.

Procedure

Macerate the benzoin and the prepared storax with 75 ml of alcohol (95 per cent) for 24 hours. Filter, and pass sufficient alcohol through the filter to produce the required volume. Transfer to a container, attach "For external use only" label and dispense.

Uses

It is used as an inhalation, in the treatment of catarrh (cold etc.) of the upper respiratory tract.

Exercise No. 60

For :

Age :

Address :

Rx

Hydrogen peroxide solution (6 per cent) 12.5 ml

Purified water to 50.0 ml

Make ear drops. Send 10 ml.

Sig : One to two drops to be put into the left ear.

Type : Ear drops.

Procedure

Mix hydrogen peroxide solution with sufficient purified water to produce the required volume. Transfer to a dropper bottle, label and dispense. Secondary label "for external use only" must be attached.

Uses

Hydrogen peroxide ear drops are used to remove wax from the ears.

Hydrogen peroxide solution acts as an antiseptic and deodorant. It is useful for detaching dead tissues and bacterial nests from dirty wounds. It is used as a deodorant gargle or mouth wash. For removing superficial stains from the teeth and for bleaching hair, it should be mixed with an equal volume of water.

Marketed preparation by :

Arora Pharmaceuticals Pvt. Ltd., New Delhi - 110035.

Hydrogen peroxide solution

Each ml contains :

Conc. hydrogen peroxide 6% w/v.

Exercise No. 62

For :

Age :

Address :

Rx

Boric acid	2 gm
Alcohol (95 per cent)	20 ml
Purified water to	100 ml

Label : The ear drops. Send 20 ml.

Signa : 3-4 drops to be put into ear occasionally.

Type : Ear drops.

Procedure

Dissolve the boric acid in about 20 ml of purified water, add alcohol and incorporate more of purified water to produce the required volume. Pack, label and dispense. Attach the secondary label "for external use only".

Uses

Boric acid has feeble anti-bacterial and antifungal properties. A solution in alcohol and water is used for instillation into ear for antibacterial and antifungal action.

Marketed preparation by :

Agrawal Pharmaceuticals, Delhi - 110092.

Boric acid ear drops.