

SCHEDULING STATUS

S3

PROPRIETARY NAME AND DOSAGE FORM

KONAKION® MM PAEDIATRIC Ampoule

COMPOSITION

Each ampoule contains 2 mg vitamin K₁ (phytomenadione) in 0,2 ml.

Excipients: glycocholic acid, sodium hydroxide, lecithin, hydrochloric acid, water for injection.

PHARMACOLOGICAL CLASSIFICATION

A 22.1.4 Vitamin.

PHARMACOLOGICAL ACTION

Pharmacodynamic properties

KONAKION MM PAEDIATRIC contains a synthetic phytomenadione (vitamin K₁). The presence of vitamin K₁ is essential for the formation of prothrombin, factor VII, factor IX and factor X, and of the coagulation inhibitors, protein C and protein S, within the body.

Pharmacokinetic properties

Vitamin K₁ does not readily cross the placental barrier from mother to child and is poorly excreted in breast milk. In the mixed micelle solution, vitamin K₁ is solubilised by means of a physiological colloidal system consisting of lecithin and bile acid.

Absorption:

Vitamin K₁ is absorbed from the small intestine. Absorption is limited in the absence of bile.

Distribution:

Vitamin K₁ accumulates predominantly in the liver, is up to 90 % bound to lipoproteins in the plasma and is stored in the body only for short periods of time.

Biotransformation:

Vitamin K₁ is transformed to more polar metabolites, such as phytomenadione-2,3-epoxide.

Elimination:

The half-life of vitamin K₁ in plasma is about 1,5 to 3 hours. Vitamin K₁ is excreted in bile and urine as the glucuronide and sulphate conjugates.

INDICATIONS

Prophylaxis and treatment of haemorrhagic disease of the newborn.

CONTRAINDICATIONS

Known hypersensitivity to any of the constituents.

WARNINGS AND SPECIAL PRECAUTIONS

Parenteral administration may be associated with an increased risk of kernicterus in premature infants weighing less than 2,5 kg.

At the time of use, the ampoule solution should be clear. Following incorrect storage, the solution may become turbid or present a phase-separation. In this case the ampoule must not be used.

INTERACTIONS

Vitamin K₁ antagonises the effect of warfarin.

PREGNANCY AND LACTATION

Safety and efficacy in pregnancy and lactation have not been demonstrated.

DOSAGE AND DIRECTIONS FOR USE

Prophylaxis

For all healthy neonates:

2 mg orally at birth, or soon after birth, followed by 2 mg between 4 - 7 days later.

Exclusively breast-fed babies:

In addition to the recommendations for all neonates, 2 mg orally should be given after four to six weeks.

A single 1 mg (0,1 ml) dose IM is recommended in babies who are not assured of receiving a second oral dose or, in the case of breast-fed babies, who are not assured of receiving a third oral dose.

Neonates at special risk (e.g. premature, hepatobiliary disease, inability to swallow, birth asphyxia, maternal use of anticoagulants or antiepileptics):

1 mg IM or IV at birth or soon after birth if the oral route is not suitable.

Intramuscular and intravenous doses should not exceed 0,4 mg/kg (equivalent to 0,04 ml/kg) in premature infants weighing less than 2,5 kg, see WARNINGS.

Size and frequency of further doses depend on coagulation status.

Therapy

Initially, 1 mg IV and further doses as required, depending on clinical picture and coagulation status. KONAKION MM PAEDIATRIC therapy may need to be accompanied by a more immediately effective treatment such as transfusion of whole blood or blood clotting factors to compensate for severe blood loss and the delayed response to vitamin K₁.

Administration

Oral use:

- With the dispenser included in the package:
 - after breaking the ampoule, place the dispenser vertically into the ampoule;
 - withdraw the solution from the ampoule into the dispenser until the solution reaches the marking of the dispenser (= 2 mg vitamin K₁);
 - administer the contents of the dispenser directly into the newborn's mouth.
- If no dispenser is available, an alternative method for oral administration is the use of a syringe as follows:
 - the required volume should be withdrawn from the ampoule with a syringe and needle;
 - **remove the needle** and administer the content of the syringe directly into the newborn's mouth.

Parenteral use:

KONAKION MM PAEDIATRIC should not be diluted or mixed with other substances for parenteral administration but may be injected into the lower part of an infusion set.

SIDE-EFFECTS

Skin disorders: Tissue necrosis and acute ischaemia at the injection site.

General disorders: Anaphylactoid reactions. Local irritation at the injection site.

KNOWN SYMPTOMS OF OVERDOSAGE AND PARTICULARS OF ITS TREATMENT

The following adverse events have been reported concerning overdose with use of KONAKION in neonates and infants: jaundice, hyperbilirubinaemia, increased Aspartate transaminase (AST) and Gamma-glutamyltransferase (GGT), abdominal pain, constipation, soft stools, malaise, agitation and cutaneous eruption. The causality of those events cannot be established. Treatment of suspected overdose is palliative and supportive.

IDENTIFICATION

Ampoules containing a clear to slightly opalescent, greenish yellow solution for oral or parenteral administration.

PRESENTATION

5 amber glass ampoules each containing 0,2 ml solution and 5 dispensers for oral administration.

STORAGE INSTRUCTIONS

Store below 25 °C. Protect from light.

The ampoule solution should not be frozen.

KEEP OUT OF REACH OF CHILDREN

Do not use this medication after the expiry date shown on the ampoule.

REGISTRATION NUMBER

KONAKION MM PAEDIATRIC Ampoules: 29/22/0492.

NAME AND BUSINESS ADDRESS OF THE HOLDER OF THE CERTIFICATE OF REGISTRATION

Pharmaco Distribution (Pty) Ltd.

3 Sandown Valley Crescent,

South Tower, 1st Floor

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South Africa

DATE OF PUBLICATION OF THE PACKAGE INSERT

Registration: 23 June 2000

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