Part II

Summary of Product Characteristics

1 NAME OF THE MEDICINAL PRODUCT

Limclair 200 mg/ml Concentrate for Solution for Infusion

2 QUALITATIVE AND QUANTITATIVE COMPOSITION

Each 5 ml of concentrate solution contains 1 g of trisodium edetate.
Also contains 8.37 mmol (192.5 mg) sodium per 5 ml.

For full list of excipients, see section 6.1.

3 PHARMACEUTICAL FORM

Concentrate for solution for infusion
A clear, colourless, sterile concentrate for solution with a pH of 7.0-8.0.

4 CLINICAL PARTICULARS

4.1 Therapeutic Indications

Limclair is indicated for hypercalcaemia and, by local application, for calcareous corneal opacities, resulting from lime burns and band keratitis.

4.2 Posology and method of administration

For intravenous injection: The injection should be diluted with Sodium Chloride Intravenous Infusion B.P. or Glucose Intravenous Infusion B.P. (5% w/v) i.e. the average dose of 5 g per day diluted in 500 ml of the dilutions.

For ophthalmic purposes: A 0.4% solution is obtained by dilution of 1 in 50 using distilled water as the diluent (i.e. 1 ml LIMCLAIR made up to 50 ml).

Routes of administration: Either the intravenous route or locally as a corneal bath.

Dose:

Adults (including the elderly): The average dose is 5 g per day. This is administered by slow intravenous infusion up to 70 mg/kg body weight daily.

The intravenous drip is regulated so that 2 to 3 hours are required for total infusion.

Children: Up to 60 mg/kg (1 g/35 lb) body weight daily, by slow intravenous infusion.

4.3 Contraindications

Renal disease.
With caution in tuberculosis.

4.4 Special warnings and precautions for use

Too rapid intravenous infusion or too high concentration may lower the serum calcium level precipitously and cause

hypocalcaemic tetany. Therefore the infusion must be undertaken cautiously, slowly, and with dilute solutions. Repeated serum calcium determinations are important for control and maintenance of normal calcium levels. When signs of tetany occur, the infusion rate should be decreased or administration should be discontinued.

Renal damage, haemorrhagic tendency and damage of the reticuloendothelial system have been reported from excessive dosage.

Toxic skin mucous membrane reactions have been noted, but these disappeared when medication was stopped. Nausea, diarrhoea and abdominal cramping pains may occur during intravenous treatment.

Rapid injection may cause a dangerous fall in the serum calcium level, leading to convulsions and cardiac arrest, and will also damage the vein used for injection.

4.5 Interaction with other medicinal products and other forms of interaction

None with B.P. recommended diluents.

4.6 Pregnancy and lactation

Not recommended in pregnancy and lactation.

4.7 Effects on ability to drive and use machines

Not applicable.

4.8 Undesirable effects

As for 4.4 above. Pain may occur in the limb receiving the infusion.

4.9 Overdose

Overdosage is of two types.

The first is due to too high a rate of infusion. This leads to a precipitate fall in ionised calcium - tetany, convulsions and cardiac arrest. Immediate control may be regained with IV calcium gluconate. However, in the presence of hypercalcaemia the ionized calcium will rapidly recover if the total dose of LIMCLAIR administered has been small.

The second type of overdosage is where the total dose of LIMCLAIR has been large or renal insufficiency is suspected. Available calcium reserves must be assumed to have been exhausted and the plasma calcium must be restored with calcium gluconate infusion.

5 PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

When given intravenously sodium ions are exchanged for calcium ions. The resulting sodium/calcium EDTA complex formed is excreted via the kidneys. The plasma ionized calcium concentration is decreased. The speed with which the total calcium level is lowered varies with the route of administration, concentration of the solution and the rapidity of the infusion. If the infusion is too rapid or at too high a concentration and the plasma ionised calcium level is reduced disproportionately, hypocalcaemic tetany may result. Development of systemic hypocalcaemia from the administration of LIMCLAIR indicates that calcium chelation is proceeding faster than replacement from plasma unionised calcium. This is followed by a mobilisation of calcium from ‘fixed’ body reserves and may, in the short term, require calcium replenishment - see overdosage.

5.2 Pharmacokinetic properties

Not available.

5.3 Preclinical safety data

Not applicable.

6 PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Sodium hydroxide (for pH-adjustment)
Water for injections

6.2 Incompatibilities

This medicinal product must not be mixed with other medicinal products except those mentioned in section 6.6.

6.3 Shelf Life

Undiluted: 3 years.

6.4 Special precautions for storage

Do not store above 25°C.

6.5 Nature and contents of container

Clear glass, Type I ampoules, containing 5 ml, packed in boxes of 6.

6.6 Special precautions for disposal of a used medicinal product or waste materials derived from such medicinal product and other handling of the product

See 4.1 for instructions on dilution with Sodium Chloride Intravenous Infusion or Glucose Intravenous Infusion prior to administration by intravenous infusion.

For ophthalmic use the product shall be diluted 1:50 with distilled water.

7 MARKETING AUTHORISATION HOLDER

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8 MARKETING AUTHORISATION NUMBER

PA 251/11/1

9 DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

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10 DATE OF REVISION OF THE TEXT

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