Part II

Summary of Product Characteristics

1 NAME OF THE MEDICINAL PRODUCT

Ledclair Sterile Sodium Calcium Edetate Concentrate

2 QUALITATIVE AND QUANTITATIVE COMPOSITION

Each 5 ml ampoule contains 1 g sodium calcium edetate.

For excipients, see 6.1.

3 PHARMACEUTICAL FORM

Concentrate for solution for infusion or concentrate for solution for intramuscular injection.
A clear, colourless concentrate for solution.

4 CLINICAL PARTICULARS

4.1 Therapeutic Indications

In the treatment of lead and other heavy metal poisoning. It may also be used in the diagnosis of early and mild cases of lead poisoning.

4.2 Posology and method of administration

Routes of Administration for Adults and Children
The diluted solution may be given either as an intravenous infusion or an intramuscular injection. See ‘Intravenous Therapy’ and ‘Intramuscular Therapy’.

Intravenous Therapy
The contents of a 5 ml (1g) ampoule should be diluted with 250 to 500 ml of Injection of Sodium Chloride B.P. or Injection of Dextrose B.P. 5% and the dilute solution given over a period of at least one hour. The concentration of LEDCLAIR should not exceed 3% in the infusate (one ampoule diluted with at least 33 ml fluid).

The dose is 60-80 mg/kg per day given in two equal divided doses with 8-12 hours between each treatment. This therapy is continued for up to 5 days followed, at least 48 hours later, by a further course of up to 80 mg/kg/day for a maximum of 5 days.

It is important not to exceed the maximum daily dose of 80 mg/kg or to give more than a total of 800 mg/kg in the two 5 day treatment periods. If the patient’s condition necessitates further treatment with LECLAIR after the two five day courses have been completed, there must be an interval of at least 7 days before recommencing therapy.

Intravenous Therapy – Children
The dose should not exceed 75 mg/kg per day given in two or three divided doses. The doses should be administered as above for intravenous therapy.
AVOID RAPID INFUSION.

Intramuscular Therapy
The same limitations on dosage apply as for intravenous therapy. Procaine (without a preservative) should be added to give a concentration of 1.5 % of the anaesthetic. The total daily dose (60-80mg/kg) should be divided into two or four injections.

Diagnostic Use
The dose of LEDCLAIR for diagnostic purpose is 75 mg/kg intramuscularly and divided into three equal doses given at 8 hourly intervals. Procaine should be added as described above for intramuscular therapy.

4.3 Contraindications

None. See section 4.4.

4.4 Special warnings and precautions for use

To minimise nephrotoxicity, adequate urine production should be established both before and during treatment.

4.5 Interaction with other medicinal products and other forms of interaction

None with recommended diluents, i.e. Injection of Sodium Chloride B.P and Dextrose injection B.P. 5%.

4.6 Pregnancy and lactation

Not recommended.

4.7 Effects on ability to drive and use machines

Not available.

4.8 Undesirable effects

Nausea, diarrhoea and abdominal pain often during intravenous administration. A burning sensation at the site of injection is also common. Thrombophlebitis can also occur, particularly if a concentrated solution is injected too quickly.

Nephrotoxicity can also occur producing albuminuria, casts and cells in the urine, oliguria and renal failure. This effect appears to be dose related being more common with overdosage.

In some patients hypotension, lachrymation, muscle pain, nasal stuffiness, sneezing, malaise and excessive thirst followed by the sudden appearance of fever and chills sometimes followed by myalgia and severe frontal headache have been reported.

Other reported effects included anorexia, nausea, vomiting, anaemia and skin lesions similar to those associated with vitamin B6 deficiency, prolonged prothrombin time and T wave inversion in the ECG.

4.9 Overdose

General supportive measures should be applied and the patient monitored for signs of renal impairment.

Precautions:
Overdosage can lead to nephrotoxicity and, therefore, considerable care must be exercised in patients with impaired renal function. The doses recommended above should be halved for patients with moderate impairment, the whole dose being given in a single daily injection. It is recommended that smaller and less frequent doses should be used with more severe renal dysfunction.

5 PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

LEDCLAIR Injection is indicated in the treatment of lead and other heavy metal poisoning. Sodium Calcium edetate is the calcium chelate of disodium ethylenediamine tetra-acetic acid (E.D.T.A.). E.D.T.A. combines with polyvalent metallic ions to form a non-ionised water-soluble complex or chelate. When this complex is given either by injection or orally, the calcium is exchanged for lead in the plasma; compounds of E.D.T.A. do not enter the erythrocytes.

Lead is mobilised from the bones and other tissues into the plasma where the exchange occurs. It is also gradually lost from the erythrocytes probably due to migration of lead into the plasma. The chelate of lead (and certain other heavy metals) is water-soluble and readily excreted via the kidneys.

LEDCLAIR may be used for the diagnosis of early and mild cases of lead poisoning. In this test the total amount and concentration of lead excreted in the urine during the 24 hours after drug administration is determined. The output of a normal child after treatment averages 165 mcg/litre. Concentration in excess of 500 mcg/litre indicate the presence of potentially toxic amounts of lead in the body and the patient should be investigated further.

5.2 Pharmacokinetic properties

Not available.

5.3 Preclinical safety data

Not applicable.

6 PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Water for injections

6.2 Incompatibilities

None known.

6.3 Shelf Life

3 years.

Once opened, the reconstituted product should be used immediately.

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 4.2 for instructions on dilution with Sodium Chloride Intravenous Infusion or Glucose Intravenous Infusion prior to administration either by intravenous infusion or by intramuscular injection.

7 MARKETING AUTHORISATION HOLDER

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