

PAMIDRONATE THERAPY FOR HYPERCALCEMIA IN A PREMATURE NEWBORN

F.D. FERNANDEZ GINES¹, T.B RODRÍGUEZ CUADROS², P. NIETO GUINDO¹, F. VERDEJO RECHE¹
fdamaso.fernandez@gmail.com

(1) Hospital Torrecárdenas, Pharmacy, Almería, Spain (2) Hospital Torrecárdenas, Family And Community Medicine, Almería, Spain.

Background

Hypercalcaemia can cause life-threatening complications. Pharmacological treatment of severe hypercalcaemia is complicated by lack of experience with some effective medicines such as bisphosphonates in newborns.

Purpose

To describe the pharmacotherapeutic management of pamidronate in severe hypercalcaemia of a premature newborn.

Material and methods

We report on a preterm infant [weight: 1.080 kg, length 38 cm] who had required total parenteral nutrition (TPN) since birth. In routine blood tests, serum calcium was 15.6 mg / dl on the seventh day of life, reaching as high as 17.2 mg / dl as a consequence of suspected adrenal insufficiency of central origin.

Results

Hypercalcaemia persisted despite the conventional treatment for excessive calcium, including removal of calcium from the TPN. The patient received intravenous pamidronate (1 mg/kg) for 1 day.

Pamidronate 6 mg was diluted in 30 millilitres of 5% dextrose saline solution, only 10 millilitres were infused in 4 hours. His serum calcium level decreased significantly, and about 15 hours later, his total calcium level normalized (10.6 mg/dl).

His serum calcium concentration returned to normal without any adverse reactions.

Conclusions

Intravenous pamidronate appeared to be a safe and effective treatment for severe hypercalcaemia in a premature newborn.

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