

HAEMATOLOGICAL TOXICITY SECONDARY TO TREATMENT WITH DIAZOXIDE: A CASE REPORT

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Objectives:

background: Hyperinsulism is a rare cause of persistent hypoglycemia in the neonatal period. Therapy can be accomplished either surgically or pharmacologically. Diazoxide treatment remains the mainstay of medical therapy. Tolerance of diazoxide is usually excellent, but several adverse effects of this drug have been described. We present a rare case of secondary anemia. A case of diazoxide toxicity is reported.

purpose: To describe a case of secondary normocytic anemia to treatment with diazoxide in infants diagnosed with congenital hyperinsulinism.

Materials and methods:

A retrospective review of medical records from admission in February 2012, to the current situation and a PubMed search of possible cases of this side-effect drug and revised assessment report of diazoxide.

The patient was a 17-day-old infant, affected by hypotonia, absence of reaction to stimuli and respiratory depression. The Infant was admitted to neonatal intensive care unit (NICU) by hypoglycemic coma / hyperinsulinism. Background: controlled and no complications pregnancy. In suspected to have hyperinsulinism patient was treated with diazoxide treatment (maximum dose 25 mg / kg / day), with good response, allowing to discontinuation the IV glucose surcharges progressively and controlling glycemic. Patient was started with total dose of 45mg/day to a current dose of 140 mg / day to gain weight.

Results:

There was a gradual establishment of normocytic and normochromic anemia with tachycardia (decrease in Hb of 14 mg / dl to 8.7 mg / dL in 15 days), which was associated with diazoxide, as the other studies were within normal (echocardiography, thyroid function, iron deficiency study).

Date	Erythrocyte	Hb(g/dl)	Hematocrit (%)	MCV (fL)	MCH (pg)	Leukocytes	Platelets
16/02	3,84	13,7	39,8	103,6	35,6	15100	379000
18/02	3,53	12,4	35,5	100,5	35,1	11600	354000
23/02	2,92	10,3	29,8	102,2	35,4	14100	375000
29/02	2,56	8,7	24,7	96,5	33,9	15600	428000
02/03	2,79	9,3	26,4	94,7	33,3	23600	380000
05/03	2,56	8,8	24,7	96,5	33,9	15600	428000
09/03	2,75	9	26,1	94,9	32,7	14900	709000

Hematological toxicity of diazoxide to be usually neutropenia and thrombocytopenia although anemia is rarely described. Other toxicities include congenital heart failure and pulmonary hypertension that the patient did not have. This reaction is informed and notified by yellow card scheme to Regional pharmacovigilance system. An evolutionary anemia study was carried out and monitored by transfusions of packed erythrocytes.

Conclusions:

- Although hematologic toxicity usually to indicate withdrawal of the drug and to be dose dependent. After a review benefit / risk, the patient is currently with diazoxide, although other possible treatment options are raised.
- After a review in pubmed, we find a single case of anemia and secondary febrile neutropenia to treatment with diazoxide in an adolescent with hyperinsulinism which was resolved after withdrawal of the drug. This adverse effect may be considered odd.
- To Appreciate the importance of Pharmacy Services and other health professionals in reporting adverse reactions for safe use of drugs.