PROGNOSIS AND EVOLUTION OF CHRONIC MYELOGENOUS LEUKEMIA IN INFANTS (0-3 Years)

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Introduction: Chronic myeloid leukemia (CML) is a relatively rare hematopoietic malignancy in the pediatric population (infants and teenagers).

Methods: we present a case of CML occurred in the first year of life of two homozygous male twins. Born in April 2010, after several episodes of multiorgan infections and following suspicious haemoglobinopathies and acute leukemia, in the absence of proper investigations, the diagnosis of CML was set in January 2011. Diagnosis was established by complete hematology exam: complete blood counts (CBC), cytology of blood and the bone marrow, and by cytogenetic analysis (karyotype). Initially, the patients received cytarabine; then hydroxyurea, next to supportive therapies. We ensured complete peripheral hematological monitoring as frequent as necessary (daily, weekly, monthly)

Results: CBC Twin I : Hb (g/dl) 10.9 +- 1.70, limits between 7.20- 13.3; WBC(/mmc): 59633.33 +- 12829, limits 10000- 101000; PLT(/mmc) 26955+- 21500, limits 1000-62000. He died in April 2012, by bleeding complications. Twin II: Hb (g/dl) 9.52+-2.039, limits 7.80- 13.5; WBC(/mmc): 86100+- 38100, limits 10200- 224000; PLT(/mmc) 39125+- 20500, limits 1000-142000. Deceased in august 2012, with bleeding complications. In both pacients, blasts percent was <10%.

Discussion / **Conclusion**: Chronic hematologic malignancies have an unfavorable evolution while occure in very young ages. A relatively longer evolution seemes to be sustained by high number of platelets. Cases occurred in children <1 year require special monitoring, care and therapeutic approach.