LANGERHAN CELLS HISTIOCYTOSIS – A Transition Follow-up Patient

Ana Margarida Balsa 1, Margarida Bastos 2, Carolina Moreno 2, Daniela Guelho 3, Luís Miguel Cardoso 1, Nuno Vicente 2, Diana Martins 2, Diana Oliveira 2, Mário Alves 1, Joana Guimarães 1, Francisco Carrilho 2
1-Serviço de Endocrinologia, Diabetes e Nutrição do Centro Hospitalar do Baixo Vouga, 2-Serviço de Endocrinologia, Diabetes e Metabolismo do Centro Hospitalar e Universitário de Coimbra

Introduction

Langerhan Cells Histiocytosis (LCH) is a rare heterogeneous idiopathic clinical entity involving clonal proliferation of Langerhan cells that may infiltrate most commonly bone, skin, lymph nodes or lungs. It affects mainly children between 5 and 15 years. The most common endocrine manifestation is diabetes insipida.

Clinical Case

JFM, female, 15 months old
Presenting with a petechial rash, fever, abdominal distension
At physical examination: Retro-auricular petechial lesions, brownish infiltrative lesions over the abdominal, thoracic and back region, abdominal distension with umbilical herniation
Complementary exams: Biochemically - anemia with thrombocytopenia, a rise of hepatic transaminases. Abdominal ultrasound - hepatomegaly with regular contour and homogenous structure, globous spleen with 12,5 cm longitudinally. Myelogram - Kala-Azar(??)
She began treatment with Glucantine but showed no clinical improvement and evolved to respiratory distress
The myelogram was repeated – immature histiocytes, with no phagocytic content, erythroid hyperplasia. Diagnostic of LCH
She began chemotherapy, with 6 courses of VP16+PDN (etoposide+ prednisone) with the need of transfusional suport.
Progressive clinical improvement, regression of hepatosplenomegaly and cutaneous lesions were observed.

2 years of age, recurrence with osteolytic lesions
Underwent 9 courses of VP16+PDN

4 years of age, presented with polyuria (up to 7 l/day), polydipsia – Diagnosed with Diabetes Insipida. Evidence of new osteolytic lesions.
Underwent 12 courses of VP16+PDN

18 years
Admitted in Transition Follow-up Consult.
Previous medical history: Langerhan Cells Histiocytosis diagnosed 17 years before with 2 recurrences and a total of 27 courses of chemotherapy. Diabetes insipidus as sequelae.
PE: stature 155,3 cm, weight 39,9 Kg, BMI 16,5 Kg/m2, Tanner M4P5, no apparent cutaneous lesion, no organo or adenomegaly.
Workup:
- No analytical changes in hemogram, leucogram, biochemical tests or pituitary function; Diabetes Insipida sustained.
- Brain MRI - globous anterior pituitary, neuro-hipophysy is not individualized, broadening of pituitary stalk.
- Normal skeletal and thoracic radiographies
- Medicated with: vasopressin 0,1 mg 2id

Discussion

Since it affects mostly children, the majority of published literature about LCH concerns pediatric patients. Our patient reached adulthood and now we face the challenge of planning the future follow-up, concerning the risks of recurrence of the primary disease and the consequences and long-term effects of the treatment of a childhood cancer.

Transition Follow-up requires a retrospective analysis of the past medical history, a comprehensive evaluation of present state and a planification of the future care throughout adult life.

References: