RECURRENT PNEUMONIA. WHEN TO SUSPECT AN IMMUNODEFICIENCY?

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BACKGROUND

- Recurrent pneumonia is defined as ≥ 2 episodes / year or three episodes throughout life. Many children have recurrent respiratory infections and it is challenging to select those patients that would require extensive studies of predisposing factors.

Oral leukoplakia

Nail dystrophy

CASE PRESENTATION SUMMARY

- A 4-year-old Moroccan boy, referred for cough and fever that does not respond to Amoxicillin-clavulanic acid. Adenovirus positivity was determined in his aspirate. He was born in the rural area of Morocco of consanguineous parents, with a neonatal history of meconium aspiration and sequela of hemiparesis, tendency to bronchoaspiration and failure to thrive.
- Since his arrival in Spain 7 months ago he had 3 episodes of bronchopneumonia and gastroenteritis due to Campylobacter. CRA: bilateral subcrepitations, without hypoxemia. Short stature (p <1, -2.84 SD), low weight (p <1; -3.76 SD), BMI: p2 (-2.12 SD), mild hemiparesis. Nail dystrophy and oral leukoplakia. Chest XR: infiltrate in right lower lobe without condensation. In the analytical: 3220 leukocytes (lymphocytes 1320, neutrophils 1450), platelets 86,000. PCR 40 mg / L. CD3 95%, CD 19 0.4%, CD4 40%, CD8 40%, NK 3%. Immunoglobulins IgG 975; Ig A 44; Ig M 338; Ig D 13. Positive burst-test. In bronchoalveolar lavage, P.jirovecii, CMV and Adenovirus were isolated, with 1,000,000 copies of CMV in blood. In the myelogram, hypoplastic marrow compatible with congenital dyskeratosis (DC).
- The evolution has been unfavourable, with symptomatic CMV infection at the respiratory and gastrointestinal levels and poor control with intravenous ganciclovir and foscarnet. Currently he is awaiting haematopoietic progenitor cell transplantation.

LEARNING POINTS

- In our case, the history of neurological involvement due to neonatal meconium aspiration could justify bronchoaspiration as a cause of recurrent pneumonia and failure to thrive. In addition, CD can associate esophageal involvement with a tendency to stenosis and bronchoaspiration. Among the causes are primary immunodeficiencies, which require early diagnosis to improve their survival. We should suspect such disorders in consanguinity, failure of therapy, bilateral pneumonias, pneumococcal pneumonia due to vaccine serotypes in immunized children, or infants with severe viral pneumonias.