CYTOMEGALOVIRUS INFECTION IN CHILDREN WITH ACQUIRED COMBINED IMMUNODEFICIENCY PRE-HEMATOPOIETIC CELL TRANSPLANTATION

Á. Vázquez Pérez(1), C. De Miguel (1), D. Corral Sánchez (1), K.A. Sándor-Bajusz(1), Ángela Deyá (2), Walter Alfredo Goycochea (3), María Lopez Marcos (3), Laia Alsina (2), Olaf Neth (3), Fernando Baquero-Artigao (1), Teresa Del Rosal (1), Antonio Pérez-Martínez (1), Ana Mendez Echevarria (1)

(1)Hospital La Paz, Madrid, (2)Hospital Sant Joan de Deu, Esplugues de Llobregat, (3)Hospital Universitario Virgen del Rocío, Sevilla

BACKGROUND

- Cytomegalovirus (CMV) infection causes significant morbidity and mortality in immunocompromised children. Our aim is to describe the impact of CMV infection in pre-hematopoietic cell transplantation (HCT) for combined immunodeficiencies

METHODS

Review of clinical case reports of children diagnosed with Combined immunodeficiency (CID) and Severe combined immunodeficiency (SCID) (criteria: International Union of Immunological Societies / European Society for Immunodeficiencies) with CMV infection before HCT, followed in three reference centers in Spain between 2008-2017.

RESULTS

The age at diagnosis of CMV was 4.1 months (IQR, 3.1-8.4) and CID/SCID 5.6 months (IQR 2.8-14.5).

RESULTS

- Persistent CMV infection** was the debut of the CID / SCID in 80% of cases.
- Median value of maximum VL:** 1.261.500 copies/mm3
- No previous blood transfusions in any of the cases
- Breastfeeding: 9 cases;** CMV PCR positive in milk: 2/3 of the cases
- They received **ganciclovir** (10 patients), a combination therapy with **foscarnet** (3), two of them have also received **cidofovir**, **leflunomide**, **infusions of anti-CMV T lymphocytes and specific gamma globulin**. In six patients, ganciclovir was changed for valganciclovir prophylaxis, reaching four cases to HCT with negative CV.

DISCUSSION

- Uncontrolled CMV infection pre-HCT in children with IDC / IDCS is associated with high mortality. It is essential to control CMV infection pre- HCT to improve the survival of these patients.**

Contact: A. Vázquez- Pérez (avzqpz@gmail.com)

CBC Pre-HCT	Minimum amount
Hemoglobin	8 g/dl
Neutrophils	625/mm3
Platelets	57000/mm3