

T3. CMV MONITORING AFTER ALLOGENEIC HEMATOPOIETIC STEM CELL TRANSPLANTATION. THE EXPERIENCE OF BONE MARROW TRANSPLANT DEPARTMENT I.C. FUNDENI JANUARY 2011 – JUNE 2013.

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Introduction:

Despite recent progress regarding the diagnosis and the development of prophylactic, preemptive and curative treatment, cytomegalovirus (CMV) infection is still a major cause of morbidity and mortality after allogeneic hematopoietic stem cell transplantation (HSCT).

Patients and methods:

We monitored with qPCR DNA-CMV, from January 2011 to June 2013, 54 patients after allogeneic HSCT.

Standard prophylactic treatment was Aciclovir 1000mg per day per os during transplant procedure and 180 days after allogeneic HSCT.

Primary CMV infection – was defined as one positive PCR assays in a previously seronegative patient.

Recurrent CMV infection – was defined as one positive PCR assays detected in a seropositive patient.

High risk or standard risk patients category – was defined based on CMV serology before allogeneic HSCT in receptor and donor. CMV seropositive patients with CMV seropositive or seronegative donor are considered high risk.

We assessed – patient and donor CMV status before allogeneic HSCT, fever, cytopenias and severity of cytopenias, treatment and days of treatment.

Preemptive treatment was Valganciclovir 2 x 5 mg/kg/day. qPCR DNA-CMV results were recorded as number of viral copies per milliliter.

Results:

Eleven of 54 (20%) patients developed at least one positive PCR assay

All the data below regards the 11 patients with at least one positive PCR assays.

Nine of 11 (82%) patients with at least one positive PCR belonged to high risk category.

Two of 11 (18%) patients developed primary CMV infection. The remaining 9 (82%) recurrent CMV infection.

Six of 11 (54,5%) patients developed CMV positive PCR in first 180 days after allogeneic HSCT.

Fever was present in 4 of 11 (36%) patients. Eight of 11 (73%) patients presented thrombocytopenia of which 25% severe thrombocytopenia. One of 11 (9%) patients presented neutropenia with no case under 500 neutrophils/mm³. Five of 11 (45%) patients presented anemia.

One of 11 (9%) patients presented pancytopenia.

All patients with positive PCR received preemptive treatment (Valganciclovir 2 x 5mg/kg per day).

Median time of treatment was 27 days.

Three of 11 (27%) patients acute or chronic GVHD occurred together with CMV positive PCR.

Conclusions:

CMV monitoring after allogeneic HSCT is an important standard in the following up of the patient, allowing early treatment of CMV reactivation or primary infection.