Management of Acquired Aplastic Anemia during COVID-19 Pandemics

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Acquired aplastic anemia

When ANC <200/mm$^3$ and matched-donor present, hematopoietic stem cell transplantation (HSCT) may be indicated. Donors should be tested for SARS-CoV-2 prior to collection. In patients with ANC<200 /mm$^3$ and no donor available, there is no data that immunosuppressive treatment (IST) might increase COVID-19 morbidity and mortality. EBMT suggest to postpone HSCT, whenever possible, especially for unrelated transplantations, until the situation come back to normal, due to the risk of COVID-19 infection and also the possible lack of Intensive Care Unit availability, mostly occupied by severely COVID-19 injured patients.

If ANC >200/mm$^3$, low-dose cyclosporin A and eltrombopag might be considered.

The patients who will receive HSCT or IST, should be tested for SARS-CoV-2. Test should be done before conditioning initiation and just prior to transplant unit admission and only dose patients with negative test result should be admitted to BMT Unit. If positive results obtained, HSCT or IST should be delayed until virus clearance.

Platelet transfusions are usually administered prophylactically to maintain levels >10,000/mm$^3$, but in patients without bleeding, expectant transfusion could be acceptable, with platelet transfusions only as needed.

There is no need to use G-CSF or steroid alone. Patients who receive horse ATG may receive steroid for the prevention of serum sickness.

Monitoring of cyclosporin A levels in patients who achieved stable levels should be less frequently then weekly in order to decrease the hospital visits.

Patients with neutropenic fever should be hospitalized initially and those with stable condition during the course might be considered for oral antibiotic treatment as outpatient.

Conditioning regimen, GvHD prophylaxis and post-transplant immunosuppression are not different than before.