MULTIDISCIPLINARY COLLABORATION IN THE TREATMENT OF PEDIATRIC HEMATOPOIETIC TRANSPLANT REJECTION WITH ALLOGENEIC MESENCHYMAL CELLS. A CASE REPORT


Background

Advanced therapies are a hope for rare diseases treatment. However, are complex in their approach should be different professionals involved gain experience necessary for optimal use.

Purpose

To describe the outcome and multidisciplinary collaborative process undertaken for the proper application allogeneic mesenchymal cells (AMC) in the treatment of graft versus host disease (GVHD) developed by a pediatric patient after hematopoietic stem cell transplantation.

Materials and Methods

Retrospective study of clinical outcomes, steps taken and requirements for the preparation of AMC (Prochymal ®). The case is a two years pediatric patient with steroid-refractory severe GVHD with severe gastrointestinal manifestations. The treatment involves administration of two doses per week for 4 weeks. If there are complete response or non-response treatment is completed, if partial response can complete treatment with a weekly dose for 4 weeks additionally.

Results

- Pediatrics, Haematology and Pharmacy were collaborating services.
- A protocol was developed for use from the instructions provided by the supplier.
  - Pharmacy processed the application as including compassionate use and acceptance of supplier and hospital management.
  - Hematology with expertise in handling blood cells facilitated conservation (-135 °C) and initially collaborated training in preparing pharmacy doses: controlled defrosting, bottling and packaging in aseptic conditions.
  - The treatment resulted in a partial response at the completion with an additional cycle.
  - No adverse reactions were observed with AMC

Conclusions

The interdisciplinary collaboration through optimizing hospital resources and rapid training of staff involved has allowed the administration of a new and urgent treatment of advanced therapy. Tolerance was good and the response to treatment was initially favorable.