Complications are the major determinants of long term survival after pediatric heart transplantation (HTX). In 2007 a pediatric heart transplant program has been established in Budapest, Hungary.

AIMS

Our aim was to summarize our experience concerning complications after pediatric heart transplantation.

PATIENTS AND METHODS

Since 2007 29 children were transplanted at the Pediatric Cardiac Centre, Budapest. They were 7.1 (5.7) years old at the time of HTX. Seven patients required ventricular assist device prior HTX. After induction, initial immunosuppressive therapy was tacrolimus and mycophenolate mofetil. Regular controls were timed every 2-6 weeks, mean follow up was 3.4 (2.1) years.

RESULTS I.

Major complications were infections, gastrointestinal and hematological diseases. Posttransplant infections: Clostridium difficile-related enteritis in 4 patients, CMV infections (1 lethal pneumonitis, 2 pts with treated hepatitis) in 3 patients, mild, but recurrent upper respiratory tract infections in 4 patients, severe fungal infection (immediately after HTX) in 1 patient, lethal myocarditis in 1 patient.

HEMATOLOGICAL DISEASES

Drug - adverse reactions: neutropenia - 7

Immune dysregulation

Rejection

Infection, tumor

Posttransplant lymphoproliferative disease (PTLD) - GI manifestation - 1

GASTROINTESTINAL PROBLEMS - IMMUNOSUPPRESSION

Drug - adverse reactions - 7*

Rejection

Immune dysregulation

Infection, tumor

C. difficile infection - 4
PTLD - GI manifestation - 1

* In 6 patients GI problems were mycophenolate related, they were converted to everolimus, however in one patient everolimus had to be withdrawn.

CONCLUSION

• Our observations underline the importance of infection control in the long term survival after HTX as 50% of posttransplant mortality was due to infective diseases
• Drug related diseases are of mild-to-moderate intensity, but treatment may be difficult
• Autoimmune diseases are present at around 10%, but due to posttransplant immune dysregulation, effective treatment could be problematic.

RESULTS II.

Controlled hypertension was present 11 patients, 6 patients needed treatment for dyslipidaemia.

Gastrointestinal complication: 10 of 29 patients had abdominal pain and enteritis.