

The small bowel transplantation (SBT) represents reasonable alternative to ultimate total parenteral nutrition of the patient suffering from terminal stage of chronic bowel failure.

To date, the small bowel transplantation was not carried out in the Czech Republic.

The initial experimental research and gaining experience with transplantations on animal models are inevitable before successful commencement of small bowel transplantation programme.

In my dissertation thesis I am in full details describing the surgical technique of small bowel transplantation in rat.

In comparison with the published data I have succeed to reach rather similar results of operating time and survival of the experimental animals.

In the second part of my experiment I tried to influence the acute rejection of the small bowel graft occurrence by administration of cytostatic agent gemcitabin. The chosen dosage of the remedy did not suppress the rejection.

In the third part I am describing the surgical technique of lymphatic vessels reconstruction in SBT rat model, which might lead to improvement of the SBT outcome.

The last part of my dissertation thesis is preclinical. I am describing the initial experience with surgical technique of small bowel graft harvesting from cadaverous donor.