

## **Abstract**

**The risk of cancer in heart transplant recipients. Association between heart transplantation and the incidence of skin cancer.**

**Background:** Organ transplant recipients are at significantly higher risk for developing a wide range of malignant tumours.

**Aim:** Analysis of the incidence, histological spectrum and clinical impact of various types of cancer in heart transplant recipients.

**Methods:** A retrospective cohort study was performed on 646 heart transplant recipients who underwent heart transplantation between 1993-2011 in The Institute for Clinical and Experimental Medicine in Prague. Relative risks of cancer were estimated as standardized morbidity ratios.

**Results:** In total, 194 incident cases of malignancy occurred in 126 patients (19,5 %). Skin cancer, solid organ tumours and lymphoma represented 62 %, 35 % and 6 % of the malignancies, respectively.

**Conclusion:** These findings confirm the fact that cancer is an important complication for long-term survival in heart transplant recipients whereas post-transplant malignancies have variable clinical impact. Even though nonmelanoma skin cancer has predominantly benign course, we underscore the importance of regular skin cancer screening in the post-transplant period.