The aim of this thesis is to determine reliability and sensitivity of the hybrid FDG-PET/CT method for diagnostics of a low virulent infection of blood vessel prosthesis in aorto-ilic area and thus support introducing this method as a basic examination algorithm when there is a suspicion on infection of blood vessel prosthesis. (...) This study should clarify diagnostic sensitivity of FDG-PET/CT in patients with the suspicion on infection, who got implanted blood vessel prosthesis in aorto-iliac area.