

ABSTRACT

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Title: Testing of HLA antigens and antibodies in the laboratory of transfusion department

Bachelor's Thesis

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Field of study: Medical Laboratory Technician

Background: Retrospective study, overview of investigations of potential kidney recipients from 12 participating hemodialysis centres during 3 years (2008 – 2010).

Methods: Following examinations were performed on potential kidney recipients in the HLA laboratory of the Transfusion Department, University Hospital Hradec Králové: serological fenotyping HLA-A, B (CDC test), PCR HLA-DRB1* genotyping (SSO, SSP) and screening of antileukocyte antibodies (CDC test).

Results: The total number of 154 potential kidney recipients were examined during the period of time from 1. 1. 2008 to 31. 12. 2010 (2008: 57, 2009: 46, 2010: 51). Screening of antileukocyte antibodies was performed on 1 140 samples, the most frequent result of antibody levels was between 0 – 30 %. Most patients were at age of 41 - 61 years, male/female ratio was 2:1. The most frequent HLA antigens concerning the group of patients with kidney diseases were HLA-A2, HLA-B8 and HLA-DRB1*11.

Conclusions: During the period under consideration the number of newly registered potential kidney recipients did not changed significantly. Number of antileukocyte antibodies examinations were nearly the same. The average age of patients did not vary significantly. Close relation among HLA-A, B, DRB1* antigens and the diagnosis of kidney diseases was detected.