

**Thesis Title**                    The Use of Immunobeads and Ox-Red Cell  
   Rosetting for class I and Class II HLA  
   Typing in Renal Patients

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#### ABSTRACT

HLA class I and class II typings were performed after T and B lymphocytes separation using nylon wool (NIH technique), immunomagnetic beads (IMB technique) and Ox-Rosette technique. Blood samples from 60 dialysis patients were divided into 2 groups. First group was HLA typed by IMB and NIH separation techniques, second group was HLA typed by Ox-Rosette and NIH separation techniques.

For IMB technique, complete typing failure occurred less than NIH, especially for class II. Correlation of lymphocytotoxic results for class I in both techniques was similar, while correlation of class II was superior for IMB technique. About time and cost calculation, the minimum of time in IMB technique is 2-fold shorter than NIH technique but the expense of IMB was higher than NIH technique.

In Ox-Rosette separation technique, this technique gave B lymphocytes yield more than NIH technique, but complete typing failure was found more frequent with Ox-Rosette than NIH technique. Because it had T lymphocytes contaminated very much (73.3%). However, correlation of both methods were similar, time and cost for the methods were not different.

In conclusion, the efficiency of IMB and Ox-Rosette techniques in HLA class I and class II typing were same as NIH technique. However, the main advantage of IMB technique is the rapidity of the technique which is of particular clinical importance in kidney transplantation.