

**ANTIGEN-INDUCED CHANGES ON HIGH ENDOTHELIAL
VENULES IN RAT CERVICAL LYMPH NODES****D.O. Dabak, G. Ozturk**

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ABSTRACT

The effect of antigenic stimulation (paratyphoid vaccine) on high endothelial venules (HEVs) of rat cervical lymph nodes was studied using conventional histological and histometrical techniques. The sequential changes of some morphometric parameters (lymph node weight, HEV diameters) after the antigenic stimulation were studied in rat cervical lymph nodes over a period of five days with daily measurements. Measurements were made on the HEVs in the paracortex especially near the corticomedullary junction. HEVs diameters began to increase two days after the antigenic stimulation ($p<0.001$) and erythrocytes were increased in the lumen of the HEVs. On day four, most of the lymphocytes were detected between the endothelial cells of the HEVs ($p<0.001$). On day five, not only HEVs were increased in number but also endothelial cells were increased in height ($p<0.001$). The weight of the lymph nodes was also highest on this day. The changes of HEVs determined after antigenic stimulation suggest that these specialized vessels have an important regulatory role in the primary immune response.