INHIBITION OF MITOSIS IN THE GUINEA PIG THYMUS
AFTER LIGATION OF DRAINING EFFERENT LYMPHATICS

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ABSTRACT

Ligature of the cervical lymph duct in guinea pigs resulted in marked dilatation of the lymphatics draining the thymus and marked reduction of mitosis in the thymus. A decrease of about 50% in the number of mitoses was found in the cortex within one day after ligation and in the medulla within five days after ligation. The thickness of the cortex also decreased rapidly and markedly in direct proportion to the decrease in cortical mitosis. Mitosis in the thymus recovered within 10 days after ligation, presumably after regeneration of lymphatics or collateralization. Thickening of the walls and valves of the efferent lymphatics of the thymus after lymph congestion was also demonstrated.