TECHNIQUE OF EXPERIMENTAL PRODUCTION OF A VENOUS THROMBUS

Z. D. Bleksmit and M. A. Kotovshchikova

From the Dry Preparations Laboratory, Leningrad Blood Transfusion Institute (Director: Prof. L. G. Bogomolova)

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Methods have been reported in Russian and foreign publications, for the production of thrombi in living animals by chemical or mechanical agents, or using thromboplastin, staphylococcus toxin, ferric chloride, hypertonic sucrose solutions, and other substances.

These methods do not, however, fulfill their purpose of producing a thrombus in a live animal.

We have made use of the technique proposed by Hirsch and Lowe [1] with slight modifications.

The animal (a rabbit) was fastened to a board in a supine position. The skin was incised in the mid-cervical line. A 3-4 cm length of the jugular vein was dissected free. The proximal and distal ends of the vein were caught up in ligatures, so as to facilitate lifting it. The ligatures were not tightened. The flat handle of any instrument was inserted under the section of vein, and the vein was given 20-35 light taps with the flat of a scalpel handle. After 2-4 minutes the vein was seen to blanch, and a formed thrombus could be felt within it. The ligatures were then removed. Slight bleeding was readily stopped by pressure with a gauze plug.

EXPERIMENTAL RESULTS

We were able to produce thrombi in 15 veins (one in the iliac vein) of 8 rabbits. Histological examination, conductred under the direction of V. P. Teodorovich, confirmed the presence of a fresh thrombus in every case. It is obvious that the given method introduces all the factors needed for the formation of a thrombus: temporary stoppage of blood flow, injury of the intima, and release of thrombokinase.

The above-described method is simple and affords a convenient means of producing a model of thrombosis in rabbits, for the experimental study of anticoagulants.

LITERATURE CITED

[1] E. Hirsch and L. Lower, Proc. Soc. Exp. Biol. a. Med., 1946, Vol. 63, No. 3 pp. 569-572.

EFFECT OF ABLATION OF THE CEREBRAL CORTEX ON THE SECRETORY ACTIVITY OF THE SALIVARY GLANDS OF DOGS

T. A. Maltseva

From the Chair of Normal Physiology (Director: Prof. E. A. Asratyan, Corresponding Member Acad. Med. Sci. USSR), I. V. Stalin II Moscow Medical Institute (Director: Assistant Prof. S. I. Milovidov)

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The first researches on the cortical control of salivation were reported by Lepine and Bochefontaine [15], over the years 1875-1888. V. M. Bekhterev and N. A. Mislavsky [2] found, in short experiments on dogs, that direct stimulation of certain cortical areas caused salivation on the side stimulated. G. P. Zelenyi, L. A. Klemenkova, and D. S. Fursikov [9, 10] observed a diminished flow of saliva in totally decerebrate dogs during