

spleen (splenic plexus) vaso-constrictory effects of a very pronounced character were obtained. Immediately on stimulation the flow in the splenic vein showed an extraordinary increase which soon gave way to an equally pronounced decrease. The flow regained its normal value sometime after the cessation of the stimulation.

The primary increase in the flow is not due to a vaso-dilation of the splenic blood vessels, but to a squeezing out of the blood "resident" in the spleen. Not until this amount of blood has been expelled by the constricting blood-vessels, can the decrease become evident. Thus, it appears that constrictory effects are obtained from the first when the nerves aforesaid are stimulated.

Although I have tested the vaso-motor power of several of the fibers composing the plexus, I have succeeded in obtaining only vaso-constrictory results.

Similar constrictory effects were incited by stimulation of the præganglionic fibres contained in the left splanchnic nerve.

Vaso-constrictory effects as displayed by a decrease in the flow and a fall in the venous pressure, were also obtained in the mesenteric vein on stimulation of the fibers centrally and distally to the ganglion mesentericum. Upon the evidence contained in the curves, the vaso-motor variations in the flow of the portal vein are said to be of peripheral origin. The portal vein itself possesses no vaso-motor mechanism.

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A clinical viscosimeter.

By **R. BURTON-OPITZ.**

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A pipette is used having a length of 20 cm. and a diameter of about 0.7 mm. The capacity of the tube, measured from its tip to a point above its enlarged middle portion, amounts to 1 c.c.¹ The tube is connected with a suction-pump developing from 50–100 mm. H₂O; a T tube is interposed so that the pressure can be measured by means of a water manometer.

¹Smaller tubes can be used, if the amount of fluid is limited.

The fluid, the viscosity of which is to be determined, is drawn into the pipette from a receptacle. By means of the usual method the time is recorded which elapses between the dipping of the pipette into the liquid and the moment when the fluid passes the mark above the bulb. A comparison is then made between this value and the value previously obtained for distilled water, the latter being regarded as 1. The experiments are performed at room temperature.

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Studies in experimental arteriosclerosis.

By **ISAAC ADLER** and **O. HENSEL**.

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Some time ago we reported to this society¹ that the intravenous injection of nicotin produced in the aorta of rabbits lesions practically identical with those obtained by Josue and others with intravenous injections of adrenalin.

The following is a brief summary of our further experiments along those lines. Many observers have laid particular stress upon the fact that where macroscopic lesions are not found, minute microscopic changes, stretching of the elastica and the like, could be recognized. We have counted as positive only such where there were distinctly visible macroscopic lesions. All observers agree that the best results can be obtained with older animals weighing over 2,000 grams. It was our misfortune that the great majority of rabbits obtainable by us were young and under the weight mentioned.

Twenty-four rabbits were treated with intravenous injections of nicotin, the dose being 5 drops of a 1-200 solution of pure nicotin. 7 died before they had had a sufficient number of injections. Of the remaining 17, results were positive in 7 after 18 to 77 injections. In 10 there were no macroscopic lesions after 20 to 117 injections.

In 6 rabbits nicotin and euphthalmin were used. Five were negative but one which had received alternate nicotin and euphthalmin injections 69 times showed aneurysm and calcification.

¹ Adler and Hensel : This journal, 1905, iii, p. 36.