

associated with hydremia. When hydremia and uremia coëxist subcutaneous edema is also present. The arterio-sclerotic cases with hypertension and with indefinite renal or cardiac symptoms show an extremely concentrated serum without any elevation of the freezing point. The results are easily summarized by giving the numerical values, low and high, and total average for each group.

F.P. denotes the freezing point and Sp.g. the specific gravity of the serum with the usual corrections. $\Delta N_d \times 10^3$ is the difference between the refractive indices of serum and water measured at the same temperature and multiplied by 1,000. The dry residue and the protein content of the serum were also determined. From these determinations it appears that the refractive index depends chiefly on the serum proteins while the specific gravity follows closely the values for the dry residue.

The clinical diagnoses were made by Dr. Van Horne Norrie and Dr. Frank Erdwurm. It is necessary to have thoroughly reliable diagnoses as far as the best contemporary clinical medicine permits. In one case of each of the important groups the clinical diagnoses have been confirmed at autopsy.

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The anaphylactic response of the human fallopian tube.

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The material for this study was obtained in the routine course of gynecological operations, through the courtesy of the surgeons. In the operations for fibroid tumors of the uterus, it is frequently necessary to remove the Fallopian tubes, which furnish a satisfactory basis for the study of smooth muscle reactions. The tubes were studied by the method described by Dale for the uterine horns of the guinea-pig. Some of the material came from women who had previously received horse serum in some form, while in the remainder, regarded as controls, there was no history of the use of diphtheria antitoxin, or other therapeutic serum derived

from the horse. The tubes which came from the sensitized individuals presented a distinct response upon the addition of minute amounts of horse serum, while the controls failed to respond even on the addition of large amounts of horse serum. The contractile response, although much less pronounced than in the case of the guinea-pig, is still unmistakable. The response to ergamine, adrenalin, and other similar drugs, is also very much less marked, in the case of the human preparation. From an anaphylactic standpoint, the human smooth muscle is, therefore, intermediate between that of the guinea-pig and that of the rabbit. This fact explains the character of the anaphylactic symptoms which have been observed in human beings.

51 (983)

**The cerebellum in cases of lowered blood pressure and "shock,"
an experimental study.**

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The concept of the histology of the Purkinje cell held today by many neuropathologists is but slightly if at all advanced beyond the classification enunciated by Nissl in 1897.

As an introduction to the following work it was necessary to make an investigation of the Purkinje cell in normal animals employing different methods of fixation and staining. It seems desirable therefore not only to state my own views as to classification but also to briefly outline the technique used.

Although monkeys (*Macacus rhesus*), rabbits, cats and dogs were used in this histological study yet the conclusions in this presentation are drawn altogether from the dog.

The animals were all well fed and young. No animal was used which was not in good health. Care was taken to exclude the factor of physical exhaustion. No animal was brought in a shrinking or terrified condition to the operating room. When