

ately again when the animal is left for some time without ether and without squeezing of the gut. In one dog with original blood pressure of 160, the blood pressure which fell to 68 mm. rose after three hours to 120 mm. It is different, however, with the sensory shock. In not a single instance did the pain sense return at any time. This holds good even for cases in which the lid reflex was prompt.

The subject will require a great deal of detailed study. But we thought of putting our experiments on record on account of the value it may have for experimental shock and especially on account of its possible practical importance in human surgery. In abdominal surgery no care is taken to avoid compressing of the gut; on the contrary, it is often employed to achieve a definite end. On the other hand, traction on the mesentery is carefully avoided. In our experience traction on the mesentery rather favors some rise of blood pressure.

4 (1379)

Metabolism of *p*-hydroxybenzoic acid and *p*-hydroxyphenylacetic acid in the monkey.

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p-hydroxy benzoic acid was fed to a monkey in one, two and three gram doses, the urine was collected for 36 hours following each dose, evaporated and extracted. The urine was found in every case to contain only the uncombined acid. This agrees with the findings of other investigators who have fed this acid to several of the lower animals. In each case from 50-60 per cent. of the acid was recovered from the urine.

After feeding *p*-hydroxyphenylacetic acid in one or two gram doses, approximately 60 per cent. of this acid was recovered from the urine of the monkey. Some of this acid existed in the free state, while a portion of it was excreted in the urine in combination with glycocholic acid as *p*-hydroxyphenylacetic acid. *p*-hydroxy-

phenaceturic acid up to this time was found only on one instance and the amount was insufficient for analysis. The melting point of 154.5-155 is two degrees higher than the melting point cited in the literature. The acid is relatively soluble in alcohol, ethylacetate and warm water but insoluble in ether, benzol and cold water. On boiling with conc. HCl, the acid split up into its two components *p*-hydroxyphenylacetic acid and glycocoll. The analysis of the compound agrees with the theoretical values for carbon, hydrogen and nitrogen.

The process of metabolism in the organisms of the monkey in regard to *p*-hydroxybenzoic acid and *p*-hydroxyphenylacetic acid is comparable to that found in lower animals and unlike that found in man. In man, the *p*-hydroxybenzoic acid is combined with glycocoll and excreted as *p*-hydroxyhippuric acid, while in the lower animals, the acid after ingestion is excreted uncombined in the urine.

p-hydroxyphenylacetic acid on the contrary is found free in the urine of man after ingestion and combined with glycocoll in the urine of animals.

5 (1380)

Influence of mere opening the abdomen, of state of shock, and of subsequent section of sciatic nerve upon the blood flow from the femoral vein in cats.

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From a series of experiments performed for the purpose of solving a certain problem in shock, a few definite facts were selected to be put on record. The following results were obtained from experiments on fourteen cats. The rate of the blood flow from the femoral vein shortly before opening the abdomen was taken as the unit, *i. e.*, 100 per cent. The figures indicate the time required for the flow of the same amount of blood, and hence express an inverse ratio to the rate; *e.g.*, 200 per cent. indicates that the rate was half as fast.