PENTOSURIA.

amyl alcohol carried out on cats has likewise shown a depressing action on blood pressure, while 25 c.c. of ethyl alcohol failed to show an appreciable change. Very small quantities of amyl alcohol (3 c.c. of a 2 per cent. solution) failed to reduce blood pressure in dogs; with larger quantities of it (10 c.c.) the fall of blood pressure was 8 millimeters of mercury, when injected in one hundred seconds. The same amount, however, when injected in seven seconds lowered the blood pressure 50 millimeters of mercury. After section of both vagi in dogs, the action of amyl alcohol was not constant; in two experiments the fall was greater, in one it was less, than with the vagi intact. The action of ethyl alcohol under these conditions likewise varied. In one experiment, amyl alcohol, 15 c.c. of a 2 per cent. solution, was injected after the introduction of atropine sulphate, both vagi being cut; the fall of blood pressure was not as great as before the injection of atropine with vagi cut, but the recovery of blood pressure to the same height as it was before the introduction of atropine occurred in from two to five minutes as against 35 seconds during the control period.

In this connection, it might be mentioned that some observations on the effect of caffeine on the depressing action of alcohol, amyl and ethyl, have been made. In both instances, there was a marked retardation of recovery of blood pressure. After the injection of 25 to 50 c.c. of 2 per cent. solutions of caffeine, the recovery was delayed, fifteen or twenty minutes.

72 (410)

Pentosuria.

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During the past two years one hundred urines which reduced Fehling's solution slightly were examined for identification of the reducing substance. In fifteen cases pentose was found to be present. Identification was made by (1) phenyl pentosazone crystals, (2) phloroglucin reaction, (3) absorption spectrum. The nature of the pentose was not determined. In all cases several specimens were examined under dietetic precautions in order to exclude alimentary pentosuria. In these fifteen cases no carbohydrate other than pentose could be detected. The pentose content ranged between 0.1 and 0.5 per cent. In all of these fifteen urines containing pentose acetone was found in appreciable quantity. Acetone was detected by treating the distillate with sodium nitroprusside and ammonia.

Five of these fifteen cases showed a positive tuberculin reaction (subcutaneous injection of the bacillen emulsion), three gave a history of chronic alcoholism but claimed to have been abstaining for a considerable time, three were suffering from some obscure intestinal disturbances, and in regard to the remaining four cases little can be said at the present writing.

The points of interest to me are (1) apparent frequency of pentosuria, (2) positive tuberculin reaction in one third of my cases of pentosuria, (3) presence of acetone in every pentose-containing urine examined.