

tation of a formalized segment in the abdominal aorta of a dog. The animal had normal pulsation in the femoral arteries and was otherwise doing well with the exception of a subcutaneous infection of the abdominal wound. On May 18, we gave the animal anesthesia in order to dress the wound, and it died in a few hours apparently from the influence of ether.

The specimen of the aorta presents a very interesting condition. The distal part of the segment is free from thrombus, the anastomosis is perfect, in the proximal portion there is a large thin parietal thrombus covering the suture line, and also a small gangrenous part of the segment.

Our research is not yet concluded, but the results obtained present some points of theoretical importance.

For ten days the circulating blood was passing through a dead canal over one inch long, and it remained fluid. It seems, then, that blood need not necessarily run through a vessel lined with an unimpaired endothelium in order to remain fluid.

The implantation of devitalized segments is technically a great deal more difficult than that of living ones. If the implanted segment is of the same size as the rest of the artery then the anastomosis is easy to perform but as soon as the clamps are removed both the afferent and the efferent parts of the artery become wider than the implanted segment and the result is thrombosis. In order that the size of the segment should correspond after implantation to the rest of the artery, we have to use a segment wider than the rest of the artery and this increases the technical difficulty.

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A study of nitrogen metabolism in a case presenting short paroxysms of fever of unknown origin.

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The patient upon whom these studies were made presented an unusual paroxysmal syndrome probably toxemic in origin, characterized by attacks of prostration, pain — chiefly abdominal — fever, tachycardia and polynuclear leucocytosis, with some nausea and

vomiting, lasting twenty four to forty eight hours. The case was reported by us to the Association of American Physicians, May 12. A study of the urinary nitrogen was made November 6 to December 2, '07, and April 7 to May 5, '08, embracing three attacks during the first period and two during the second. Urea and ammonia nitrogen did not vary beyond normal limits. The chief interest centered in the uric acid and creatinin output. During the latter part of the first period the uric acid, on a uniform purin-free diet of 2,350 calories for a girl of 47.3 kilos, showed a distinct fall before the last attack, with a subsequent rise. During the second period the patient was kept on a creatin and purin-free diet unrestricted as to quantity, the amounts of creatinin and uric acid rising sharply after each attack, the latter showing a fall before the attack. Throughout the whole period the uric acid showed as wide variations as Kaufman and Mohr, and von Noorden and Schliep, described in the subjects of true gout. A test of her tolerance for exogenous purins, however, showed that her elimination of uric acid after eating 580 grams of beef was even higher than Burian and Schur's normal figure of 50 per cent. The creatinin was also wholly eliminated. Comparison of the eliminations during these two days with those in the urine after the attacks shows that, in the latter urines, she excreted as much additional uric acid and creatinin as might be derived from 580 grams of beef, with a nitrogen loss of 10 grams after the first attack and 13 grams after the second. The increased nitrogen output on the two meat days over the previous average was about 9 grams. The increase in the uric acid and creatinin, therefore, would seem to correspond closely with the amount of toxic tissue destruction that occurred in these short paroxysms of fever.

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Histological changes in transplanted blood vessels.

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It has been shown by many experimenters that segments of blood vessels may be transplanted to other vessels, in animals