

bovine spermatozoa has been determined. Data are presented including total N, total lipid, ash, and total phosphorus. Seventeen

amino acids were determined by microbiological assays.

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### One Stage Method of Hepatectomy in the Dog.\* (18676)

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Complete removal of the liver from dogs has been achieved by various methods(1-3). The following new, one-stage method has given satisfactory results to the authors and can be executed without great difficulty. The abdomen having been widely opened, and the incision kept apart with a self retaining retractor, the gastro-hepatic omentum is cut, after the portal vein has been freed from all other structures. The portal vein is cut against the liver, introduced into a small metallic tube according to Queirolo's method(4) and implanted sideways into the vena cava above the renal veins. The liver is then severed from the abdominal wall. When this is done, a strong thread is placed around the vena cava against the diaphragm in order to prevent the reflux of the blood from the heart. The flow of the blood to the liver has been previously stopped by 2 clamps placed one on the vena cava and the other on the portal vein upstream from the portal-cava fistula. Then

a venous graft which is to replace the intra-hepatic part of the vena cava is put into position. The graft is the intra-thoracic part of the vena cava of another dog used in a previous operation; it has been kept at 0°C in Tyrode solution to which penicillin and a sulfamide have been added. After the vena cava of the dog has been cut transversely under the liver and against it, the inferior part of the graft is inserted into the caudal segment of the vein and fixed above the portal-cava fistula. The other end is introduced into the intra-hepatic part of the vena cava and pushed upwards until it finds its place between the top edge of the liver and the diaphragm. The ligature lying behind the liver is then firmly tied on it. The clamps placed on the portal vein and the vena cava being taken away, one proceeds to the extirpation of the liver after having split the intra-hepatic part of the vena cava from the lower end to the top.

Dogs which have undergone this operation, performed with an aseptic technic, survived for 12-14 hours. Death occurs from circulatory collapse. To restore the vascular tonus, we resorted to the use of a hydrosoluble derivative of desoxycorticosterone added in sufficient quantity to the glucose solution, which is injected, drop by drop, into a vein. The survival of 3 dogs which received this treatment, was respectively 16, 26 and 31 hours.

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\* A detailed description of the procedure is given in English in a paper to be published in *Arch. Internat. de Pharmacodynamie et de Thérapie*.

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