pharmacy counter all that I think I shall need. One can then add or delete as various steps in the proposed operation, which should now be occupying the surgeon's mind, would appear to suggest. Finally, the operation itself should not be hurried. Patience and a determination to keep collected will run anatomical knowledge and mechanical skill a very good second in ensuring success.¹

CHRONIC ENDOCARDITIS WITH THROMBOSIS IN A MARE.

By W. GRAHAM GILLAM, M.R.C.V.S., Minehead, Somerset.

Subject.—Chestnut hackney mare, aged seven years.

History.—The mare was the property of a gentleman who never used her in any way. She was kept at grass, except when the weather was severe, when she was stabled and given hay and a small quantity of corn.

I was first asked to see her in the spring of 1905, when she had a very mild attack of strangles, from which she apparently quickly recovered without any noticeable complications. From this time up to July of last year she had several attacks of colic, these attacks usually occurring when she came in from grass. Relief was always obtained by means of a colic draught.

On the 22nd of July last I was again asked to see her, when I found her, to all appearances, in excellent condition, but with a weak pulse and very anæmic mucous membranes. Her appetite was very capricious. I prescribed mineral and vegetable tonics, and under this treatment she improved considerably.

I was called in again on 25th September. She had then markedly fallen off in condition; the pulse was very feeble and intermittent, and I could distinguish no definite heart sounds. Mucous membranes very blanched, mare quite off her feed, and I noticed that she moved her hind limbs in a very wooden manner. I continued the tonic medicine, with occasional stimulants, and her appetite after a time returned, but the stiffness of the hind limbs increased.

On 28th November the anæmia was most pronounced, pulse almost imperceptible, temperature 98°. Well-marked dropsical swellings, extending from the lower part of the neck to the udder. Urine continually trickling away. Stiffness of hind limbs most marked, and the extremities very cold.

The condition of the hind limbs made me suspect thrombosis, so I examined the iliac arteries *per rectum*, and could feel no pulsation in the right artery and very little in the left..

I saw further treatment was useless, so wrote to the owner to that effect, and in reply he told me to do what I liked with her. I made arrangements to destroy her on the 30th. On arrival I found her down and dying. I hastened death by opening the carotid artery,

¹In this and in the preceding case my best thanks are due to Mr Edward Morgan, my assistant, for the very capable help he afforded me.

and the amount of blood that escaped could not have exceeded 60 ounces in quantity, and was very watery in appearance.

On removing the skin a large quantity of dropsical fluid escaped.

The thorax contained no fluid, and the abdominal cavity about 40 ounces.

Condition of organs:—

Heart considerably enlarged, its base diameter being $12\frac{1}{2}$ inches and the length from base to apex 16 inches. The muscular tissue had a parboiled appearance, and on opening the cavities the endocardium for about two-thirds of its area was covered with a verrucose growth of a cauliflower-like appearance, the individual growths varying in size from that of a pea to that of a large walnut. Some of the growths had a well-defined pedicle. The endocardium covering the valves was most affected.

Lungs pallid, but otherwise normal.

Posterior aorta: About 1 inch anterior to the great mesenteric artery I found an aneurism, of the size of a duck egg, with very thin walls.

Mesenteric arteries: A good many were partially occluded by thrombi, some of which could only with difficulty be removed from the blood vessels.

Renal arteries: The right entirely blocked, the left partly so, by thrombi.

Kidneys very pallid on section, and showed well-defined areas of infarction.

Internal iliac arteries: The right was totally occluded by a thrombus 4 inches in length, which on section was grey in colour, had a stratified appearance, and was gritty to the touch. The left was partly blocked, the thrombus having a small channel through its centre.

Bowels normal in appearance. I made a thorough exploration for parasites, but found none.

Stomach normal.

Liver slate-coloured on section, and had a macerated appearance.

Spleen very small, but otherwise normal.

Conclusions.—I consider that the endocarditis was set up by the strangles streptococcus; and that the thrombosis, with subsequent infarction of the kidneys, was due to detached portions of the endocardial growths entering the circulation and becoming arrested in the arteries.

ACUTE ARTICULAR RHEUMATISM.

By E. CLIVE WEBB, Capt., A.V.C., Mona, Punjab, India.

THE following cases of the disease described in text-books under the heading of acute articular rheumatism have occurred during the year amongst the animals under my veterinary charge, and are, I think, not altogether without interest. The various constitutional diseases from which animals of the depôt have suffered during