

tried the effects of which often proved harmful. This dog was undoubtedly bled too fast and the treatment was begun too late. The blood injected from another animal was designed partly to cover accidental losses and partly to replenish serum proteins. The dog's condition on the morning of the fourth day after operation, while serious, did not appear worse than that of the control dog twenty-four hours before death, i.e. on the second day after operation.

Experiment 3. June 3, 1914. 3 p.m. Control. Bilateral nephrectomy.

Dog, $11\frac{1}{2}$ kg. Died 11 a.m. June 6. Postoperative life 68 hours.

Experiment 4. June 15, 2.30 p.m. Bilateral nephrectomy. Dog weight 11 kg.

June 16: 2.15 to 4.55. Blood drawn 200 cc. Returned 320 cc. containing 1 g. sodium acetate.

4.20 to 5.20. Blood drawn 50 cc. Returned 140 cc.

June 17, 11 a.m. to 1 p.m. Blood drawn 305 cc. Injected 250 cc. saline solution containing $1\frac{1}{2}$ grams Na_2CO_3 . Returned corpuscle mixture 330 cc., distilled water 75 cc., saline solution 125 cc., half strength saline 100 cc.

2.15 to 4 p.m. Blood drawn 310 cc. Returned 355 cc. containing $\frac{1}{3}$ gram Na_2CO_3 .

4.20 to 5.40. Blood drawn 345 cc. Injected 75 cc. saline solution with 1 gram Na_2CO_3 . Returned corpuscle mixture with half strength saline 315 cc.

June 18, 11 a.m. to 12.45 p.m. Blood drawn 350 cc. Injected saline 200 cc. with 1 g. Na_2CO_3 . Returned corpuscles diluted with half strength saline to 350 cc.

Note. Dog in good condition, takes intelligent interest in surroundings.

2.15 to 3.35. Blood drawn 385 cc. Injected 70 cc. of fresh blood from normal dog and 75 cc. half strength saline. Returned corpuscle mixture 450 cc. containing 2 grams Na_2CO_3 . Dog seems bright.

June 19, 10 a.m. to 1.20. Blood drawn 290 cc. Injected 300 cc. fresh blood from normal dog. Immediately afterwards blood drawn 210 cc. Returned corpuscles in 450 cc., together with 4 grams NaHCO_3 .

Dog appears in fair condition; weighs 11.18 kg, though he has taken practically no food since operation.

2.30. Blood drawn 115 cc. Signs of collapse. Immediately injected 200 cc. saline solution containing 2 g. NaHCO_3 .

Blood drawn 90 cc. Dog dies suddenly at 3.10 p.m. Post mortem examination showed great internal haemorrhage, about 500 cc. being