

severity lasting two minutes. The blood pressure (systolic) at this time was 150 mm. Hg. There were two more convulsions that day. Following bleeding, purging and sweating, a normal convalescence ensued.

The hydrogen-ion concentration of the serum obtained at venesection was 7.55.

The nonprotein nitrogen in the blood was 42 mg. per 100 c.c.

January 24, the phenolsulphonephthalein test showed 55 per cent. excretion in two hours.

The ammonia nitrogen in the urine:

January 13 = 5 per cent.

January 14 = 9 per cent.

January 16 = 7 per cent.

CASE 4.—M. K. (Obstetrical Service), a white woman, aged 19, was admitted Jan. 25, 1915. Diagnosis: eclampsia; spontaneous labor.

The patient was a strong, well-nourished primipara, nine months pregnant. The pregnancy had been uneventful until the morning of January 25, when, at 4 a. m., she began to have severe headache, nausea and vomiting. Shortly afterward she had one convulsion. When seen in the out-patient service she was conscious but drowsy. Blood pressure (systolic) was 150 mm. Hg; the pulse 80 per minute. The urine showed 8 grams of albumin per liter.

She was admitted to the ward at 7 p. m., unconscious, exceedingly restless, and having typical, moderately severe eclamptic convulsions at intervals of three-quarters of an hour. The blood pressure (systolic) was 180 mm. Hg. There was no dyspnea and very slight edema of lower legs. She had seven convulsions in all, the last occurring at 5 a. m. on the morning of January 26. Blood for hydrogen-ion determination, obtained after the third convulsion, gave a reading of 7.5 on the serum; 7.3 on the whole blood.

Following venesection, purgation and sweating, and the administration of 40 grams of sodium bicarbonate by stomach-tube, the convulsions finally ceased and consciousness returned on the morning of January 26. On January 28 a dead child was born spontaneously. The puerperium was uneventful.

The ammonia nitrogen of the urine during the three days preceding delivery ranged from 18 to 10 per

January 29, the hydrogen-ion concentration of blood was for the serum, 7.8; for the whole blood, 7.5.

CASE 5.—L. C. (Harriet Lane Home No. 6,538), a white boy, aged 3, was admitted Jan. 13, 1915. Diagnosis: sarcoma of the kidney and antrum; acidosis.

The boy had been a normal, healthy child up to three months before admission, when, following a trauma to the face, a small, red swelling appeared on the left cheek, subsequently pushing through to the roof of the mouth. Though painless, this swelling had gradually grown larger.

Examination showed a well-developed, well-nourished child. There was a firm mass in the left cheek, apparently arising in the antrum, and pushing down the left side of the hard palate in the mouth. There was a nodular, firm mass, the size of a man's fist, in the right umbilical region.

January 16: Breathing was rapid and deep.

January 17: There was marked dyspnea; the respirations were 40 per minute.

January 18: Respirations unusually deep, with actual "air hunger." The urine contained acetone and diacetic acid.

Sellards' test showed colorless on complete evaporation. The hydrogen-ion concentration of the serum was 7.2. One hundred and seventy-five c.c. of a 5 per cent. solution of sodium bicarbonate was given by the Murphy method. This was followed by 175 c.c. of a 4 per cent. solution of sodium bicarbonate intravenously. After the first 50 c.c., respirations became noticeably less labored, and shortly after the completion of the injection the child was quite comfortable. Small doses of bicarbonate were continued by mouth.