

ing case shows that in the pernicious vomiting of pregnancy acetone and diacetic acid may be excreted in the urine:

A woman, aged 26, was married in November, 1904. The last menstrual period occurred on January 8th, 1905. About February 5th she began to have nausea, but vomiting did not begin until the 20th, at which time she was very constipated. The vomiting was relieved by ordinary treatment, rest and restricted diet, but on March 4th a violent attack occurred. From the 8th to the 30th she was kept in bed and fed almost entirely by nutrient enemata. Any attempt to feed by the mouth was followed by severe headache, nausea, and vomiting. There was great restlessness, twitching in the limbs, blurred vision, pain in the back, and intestinal colic. Four small hemorrhages took place from the bowels, the source of which appeared to be the rectum. On March 20th she vomited fourteen times during the day. She became progressively worse, and each attack of vomiting was more alarming than the previous one. Abortion was induced on the 30th and uninterrupted recovery ensued.

The following observations on the urine were made: On March 25th 600 c.c. were passed in the twenty-four hours with a s.g. of 1.028. There were a trace of albumin and a marked reaction of acetone and diacetic acid. No sugar was present. The amount of organic acids present was equivalent to 12.2 c.c. of a decinormal solution of sodium hydrate. The urea amounted to 8.86 gr. On the 29th 640 c.c. were passed containing 8.512 gr. of urea. The amount of nitrogen present as ammonia was 4.75 per cent. of the total nitrogen. Marked reactions for acetone, diacetic acid, indican, and phenol were obtained. Twenty-four hours before the operation the reaction for diacetic acid was more marked than on the previous day. On the 31st, the day after abortion, the amount of urine rose to 1,260 c.c., there was a distinct reaction for albumin, and granular casts were present. The amount of diacetic acid and acetone was considerable, but less than before the operation. On April 1st there was a distinct reaction for acetone, but only a trace of diacetic acid was present. After this the amount of these bodies diminished, but not in a regular fashion. On the 3rd, 4th, and 5th they were absent, but on the 8th there was a marked reaction for diacetic acid and a trace of acetone was present. It is noteworthy that on this day there were severe headache, nausea, and vomiting. A high degree of intestinal putrefaction was indicated by large quantities of indican and phenol in the urine by a high ratio of the combined sulphates to the pre-formed sulphates (1 to 1.9).—*Med. Review.*