

of June, the average amount passed daily would be about 24 oz.—minimum 15½ oz., maximum, 29 oz.

An analysis made on the 15th of May gave the following results:—Color pale; odor urinous; reaction acid; albumen present also heavy whitish deposit; pus cells and crystals present; spr. gr. 1010.

From the first of May her health improved steadily and uninterruptedly. On the 10th she was allowed to sit up in the chair.

June 19th, urine still comes in considerable quantity from the right sinus. On the left side only pus appears on the dressings.

To test the potency of the ureters on June the 20th a few c c of methylene blue, representing about one gr. was injected into the fistula on the right side through a small catheter. In 1½ hours the urine, the first which was passed afterwards, was coloured a deep blue. On the 23rd of June, the methylene blue test was applied to the left side with completely negative results.

The patient left the hospital on the 26th of June feeling well and looking healthy. The two sinuses were still discharging.

On July 20th I received the following report of her condition:—“Saw Mrs. D. and she feels very well.” Results of an analysis of urine voided same date. Color pale; odor urinous; reaction faintly acid; sp. gr. 1005; albumen present after filtration; moderate amount of heavy whitish deposit; pus and epithelial cells a few; no crystals or casts; quantity about 25 oz.

The points of interest in the case are: 1. The entire absence of the most prominent symptoms characteristic of renal calculus; 2. the enormous size of the stone; 3. the small amount of healthy secreting kidney structure which is capable of maintaining life under adverse conditions.

With reference to the first point, I may state that renal calculi may and do exist and give rise to no special subjective symptoms, but this is not usually the case. Mr. Henry Morris records a case in which a calculus had grown quietly to such a size as to be felt by palpating the abdomen without giving rise to any special symptoms. Bruce Clark refers to thirteen cases of quiescent calculi out of twenty-four post-mortems and Mr. Murray, of Cape Town; Noble, of Philadelphia, and Doran of London, have each reported cases of painless renal calculi.

Then again the symptoms caused by renal stones may not be referred to the kidney or ureter. On the contrary they may be transferred to other organs. Cases of renal calculi are often treated for cystitis. A very interesting case is referred to by Mr. Morris in which a vesicovaginal fistula was maintained for nearly ten years, to relieve a supposed case of cystitis, but at length a renal calculus was removed and