

tained a small quantity of pus. On opening the bladder it was found to contain a stone one half inch in length, weighing 246 grains. The mucous membrane was injected, and covered with a thick mucus, and it, as well as the muscular coat, was very much thickened. There were no pouches in the gland. Prostate gland healthy. The calculus found in the kidney was the triple phosphate. That in the bladder was the triple phosphate with a thick loose coating of phosphate of lime. The whole formed on a nucleus consisting of a fragment distinctly recognizable. Permission to examine the head was refused. Most probably no organic change would have been found, as it is reasonable to suppose that the convulsions depended upon cerebral irritation propagated to the brain from the bladder and kidneys.—*Phil. Med. Exam.*

Differential Diagnosis between Cancer and Hypertrophy of the Stomach.

—By DR. BRUCH.—The following points may be of importance towards the differential diagnosis of these conditions; but it must be understood that they refer to only pure well-marked cases, and that for the complicated or combined instances there is no general rule, nothing but the details being sufficient:—

1. Hypertrophy, or the increase of the normal substance of an organ, with retention of its texture and figure, appears in the stomach as a gradual, and more or less uniform swelling of the gastric membranes. Cancer, which is always a true after-growth, or new structure, takes, with few exceptions, the form of a swelling, and appears as a circumscribed, prominent often knobbed or tuberculated, after-growth, which destroys the normal structure of the tissues.

2. Hypertrophy, even where it is the result of a cancerous constriction, is characterized by a *gradual* swelling of the membranes, having the proportion of their natural increase of thickness towards the pylorus; while on the other hand, cancer may be situated in any possible part of the stomach, and always exhibits a partial degeneration of the membranes.

3. In hypertrophy, often only one membrane (*viz.*, the muscular) suffers,

and its whole extent. In cancer, on the contrary, very often several membranes become transformed into one common after-growth.

4. Even when many membranes are hypertrophied, they are always seen as particular layers lying over each other; while in cancer sometimes any, sometimes all, are irre recognizable.

5. The division of the muscular coat into compartments is not characteristic of cancer. On the contrary, even where it occurs in true cancer, it only signifies hypertrophy of the muscular tunic.

6. In hypertrophy the coats are, at first, in spite of their thickening, separable from each other; in cancer they are fused in the after-growth.

7. In general and pure hypertrophy, the stomach is always narrowed and hardened. In cancer, especially of the pylorus, there is usually considerable dilation and thinning.

8. Hypertrophy may precede the cancerous new growth, and occurs as a partial hypertrophy of the neighbourhood simultaneously with the cancer; or is associated with cancer of the pylorus, as a secondary event, when constriction appears. In the latter case, the (general?) dilatation remains.

9. Chronic gastritis occurs as well in hypertrophy as in cancer; but it would appear that, in the first, it is more as a cause; in the last as an effect.

10. In hypertrophy, a large portion, or the whole, of the mucous membrane, is more frequently diseased; while in cancer, a great extent is commonly still normal.

11. The diagnosis during life is trustworthy only in those instances where appearances of constriction are present; since in other instances, hypertrophy is scarcely accompanied by any other symptoms than those of chronic gastritis.

12. A sensible knobbed swelling, especially when sharply defined, or many knots of a tumour in the epigastrium, speaks decisively for an after-growth of the pylorus, and against a pure hypertrophy; while on the contrary, a diffuse resistance and swelling of the epigastrium speaks for the latter condition, especially when the hard part corresponds to the form of the pyloric portion of the stomach. (That the swelling is impalpable, does not definitely exclude cancer.)