

EXTIRPATION OF A HYPERNEPHROMA, WEIGH-
ING FOUR AND A QUARTER POUNDS, FROM
AN INFANT TWENTY MONTHS OF AGE.

RECOVERY.

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THE patient, a boy aged one year and eight months, was referred to me by Dr. M. P. Conway, Aug. 26, 1906. Family and personal history unimportant. Four months ago mother observed veins of right testis were swollen. Gradual enlargement of the abdomen followed. Appetite fair, and bowels acted normally. No urinary disturbance. Though irritable and fretful, child seemed not to have pain. Chief complaint, swelling of the abdomen.

Examination showed an infant thin but not emaciated, and pale but not cachectic. Abdomen enormously distended by a soft, solid growth, smoothly rounded everywhere except in the right flank, where a knotty mass was perceptible. Flatness everywhere on percussion, and a thrill on tapping the surface. No tenderness. Urinalysis shows no albumin or sugar, and no pus, blood, or other morbid deposit.

Operation, Aug. 29.—Ether. Patient in Trendelenburg position, as recommended by Abbe, to lessen bleeding and to keep the blood in the head after release of the abdominal vessels from pressure by the growth, thus diminishing shock.

In view of the great size of the tumor I selected the transperitoneal method, splitting the right rectus muscle from the costal arch nearly to the pelvis. The lumbar incision seemed to me not to offer so good access to a mass filling the belly, while the injury to the abdominal musculature would necessarily be greater, as the muscle fibres must be in part divided.

Statistics of the two operations give (Kuester) a mortality of 26.62 per cent. for the transperitoneal, and 24.70 per cent. for the loin incision. Even if this statement is accurate—and Jonnesco in 17 operations had a lower mortality from the transperitoneal route—the figures mean simply that it was the larger

and more complicated growths that required access by laparotomy, the higher mortality depending on the inherent difficulty of the cases, not on the operative method employed.

The statement that cases operated by the loin give one-half more permanent recoveries than those operated by the anterior route, is doubtless to be similarly explained.

The rectus opening gave a good view of the mass (Fig. 1), which with huge veins coursing over its surface presented a formidable appearance. Perpendicularly on its anterior face lay the ascending colon, lifted along with the posterior layer of peritoneum, behind which the tumor had developed. The other intestines were crowded over to the left, out of sight. In the peritoneum, constituting the anterior covering of the mass, an opening was made with scissors to the right of the colon (in order not to jeopardize its nutrient vessels coming from the left). Through this opening, by finger dissection, the peritoneum with the ascending colon was stripped from the tumor. Bleeding was free during this step, and required pressure with hot gauze to control. Indeed, the greater part of the blood supply of the growth seemed to come from these peritoneal vessels enlarged to meet its needs. Working behind to the right, I found and freed the kidney, and then by pressure on the outside of the abdomen, the tumor, *plus* the kidney attached by its upper pole, were delivered through the incision, which, generous as it was, had to be widely stretched to permit the extrusion of the mass. As this emerged it revolved to the right, like a geographical globe, exposing the pedicle, consisting of renal vessels, etc. (Fig. 2). An infected gland was disentangled from their midst, and then a catgut ligature applied, and the mass cut away.

It would have been possible in this case, I think, by a plastic resection to have preserved the portion of kidney not implicated in the growth, as was done by Abbe in one of his cases. But the child's condition became so bad that choice was made of the most rapid means of ending the operation.

Inspection now showed that the mesocolon stretched over the left side of the tumor had in the process of enucleation been torn from its gut for a space of some four inches. Here, too, there was no time for other course than to rejoin it as rapidly as possible to the colon, and hope for anastomotic restoration of the blood supply,—a hope happily justified by the event.

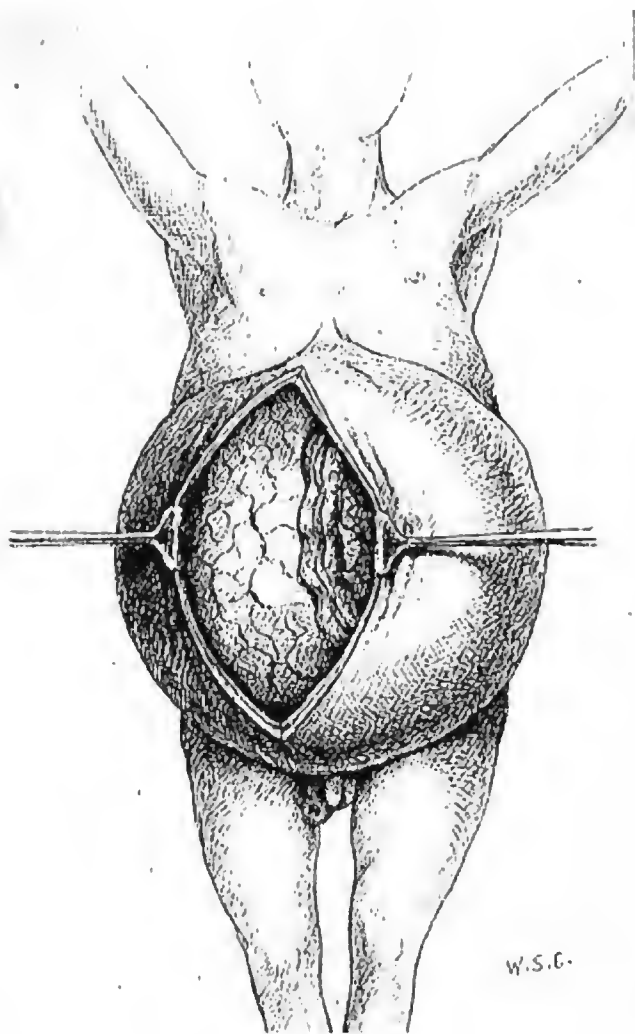


FIG. 1.—Appearance of tumor on opening abdomen. Note ascending colon and vagina.

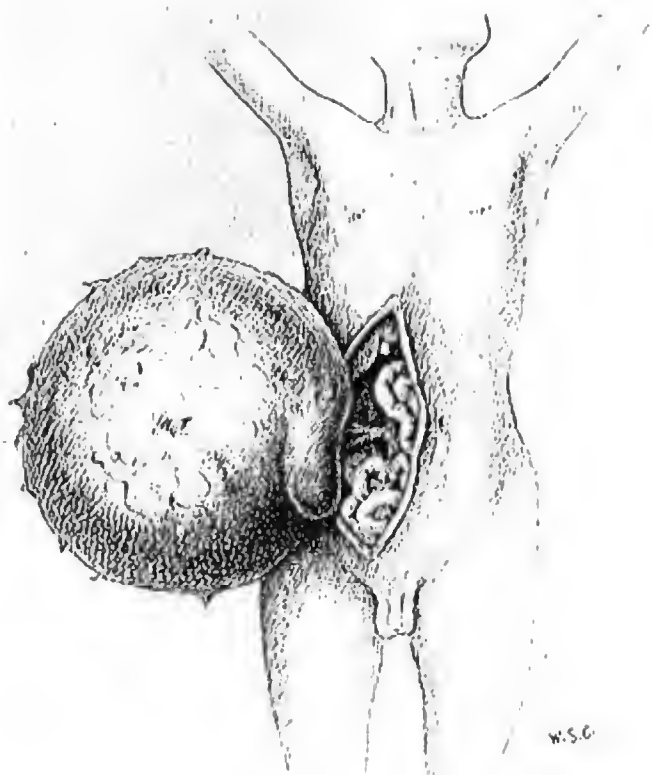


FIG. 2.—Schematic view of tumor delivered, still attached by pedicle. Note right kidney and tumor attached to its upper pole.

The opening made by scissors in the posterior peritoneum went for similar reason unsutured. The abdominal cavity was filled with hot saline, and the wound of entry quickly closed in tiers. Thus the child got off the table deeply shocked, but alive, which was almost more than had been hoped. Time of operation, 32 minutes.

Hypodermic stimulation, coffee and whiskey by rectum, patient placed at a slant, head down in bed. Temperature 102° in the evening, but fell to normal next morning, and remained there. Recovery was in all respects uneventful. The patient now taking on weight and looking rosy.

The tumor weighed four and a quarter pounds. Dr. Sondern to whom a specimen was sent for sectioning reported it to be hypernephroma.

One of the latest reviews of the prognostics of operation for malignancy of the kidney is contained in the "Handbuch der Urologic," 1905, edited by Frisch and Zuckerkandl. The writer (Paul Wagner) finds the operation-mortality much reduced in recent years,—from 61.22 per cent. (Gross) to 24.44 per cent. (Kuester). Schmieder's statistics gives 64.3 per cent. operation-mortality in the first decennium of renal surgery, 43 per cent. in the second, and 22 per cent. in the third. But the mortality among children is still 28.1 per cent.

As regards permanence of cure the literature furnishes but 34 cases living beyond the two-year limit *recidiv-frei*; and 21 cases beyond three years,—16 adults, 5 children.

So that while the case reported may be regarded as a fortunate instance of operative recovery, permanency of recovery can be affirmed only after some years.