were the ascending and descending colon, respectively, in a state of faecal impaction.

Death occurred March 30, 1882, supervening upon a severe mental shock. An autopsy was made by Dr. William M. Gray two days later, Dr. Hutchinson and myself being present. To quote from Dr. Gray's notes: "Upon opening the abdomen found complete prolapse of the transverse colon. It was carried beneath the pubis and rested on the bladder. The large intestine was much narrowed, and was filled throughout with hard nodulated faeces; the meso-colon was absent, and the omentum, which was free from fat, was extremely atrophied; the rectum was normal, showing no evidence of stricture; the liver was of normal size, but upon microscopic examination showed marked cirrhosis."

Thus that which had appeared to be the ascending colon proved to be the descending limb of the displaced transverse colon, and that which had seemed to be the descending colon was shown to be the ascending limb of the same malformation.

The pain which had previously been felt in the region of the liver, and which had been relieved by recumbency, had manifestly been caused by the sharp flexure of the colon contiguous to it, and the rectal obstruction by the crowded condition of the pelvis produced by the invading loop of large intestine.

CASE III. Male, aged thirty years, a tailor's cutter, under attendance nine days prior to decease. The subject of advanced Bright's disease, with "hyaline, epithelial, and granular tube casts, also mucous cells, compound granule cells, and free oil globules," he was extremely exhausted thereby. He also complained of severe pain in the abdomen to the right of and slightly above the level of the umbilicus. Upon inspection and palpation of the part no enlargement or induration was discovered, but light percussion developed an intensely tympanitic sound confined to the region described. Misplacement of the transverse colon was suspected, and the region kept under observation for any evidences of faecal impaction which might, but which did not, present. Death occurred suddenly, March 19, 1883. Autopsy two days later by Dr. William M. Gray, operator, Dr. William H. Burke and myself being present.

The following notes were made by Dr. Burke: "... Body rather emaciated, and showing signs of commencing decomposition. On opening abdomen absence of fat noted; omentum normal. Peritonæum showing traces of lymph and pus, in the pelvic region especially, but no general inflammation. Transverse colon empty, distended with gas, and has a sharp flexure at its centre, bending obliquely downward and toward the right, to the level of the umbilicus, thence sharply upward to its normal position. Meso-colon intact and apparently normal except in length. No sign of faecal obstruction at the point of flexure. Both kidneys scirrhotic; capsule adherent, and secreting structure destroyed."

Evidently the heightened tympany localized near the umbilicus, which had been previously recognized and ascribed to the presence there of a portion of the transverse colon misplaced, had in reality been so caused.

No adhesions of the displaced parts were found in any of the cases cited. The intestinal fault was probably not the cause of death in any of them. Taking them together, it will be seen that clinical conditions and post-mortem appearances agree in at least one im-

portant particular, namely, the location of the displaced intestine in contact with the anterior abdominal wall and below its normal site.

The normal anatomical relations of the colon have a special significance in the light of these cases from a diagnostic point of view. The ascending and descending portions of the colon are, normally, to be found in contact with the *posterior* or lumbar wall of the abdominal cavity, — behind the small intestines, — and are there bound closely down by reflections of the peritonæum. The transverse colon, on the contrary, is normally in contact with the *anterior* abdominal wall — in front of the small intestines — where it is loosely suspended by the transverse meso-colon, a structure of considerable length.

It therefore appears to be a practical impossibility for the vertical portions of the large intestine to become spontaneously misplaced anteriorly. But of the transverse colon, its displacement downwards, — in which changed position its relation of contact with the anterior abdominal wall is retained, — these cases show to be a condition of repeated occurrence.

Conclusions. (1.) Displacement of the transverse colon downward within the abdomen may be to any degree, partial or complete.

(2.) Such displacement will present as solid tumor if the bowel be in a state of faecal impaction, or as a limited area of heightened resonance if the bowel be distended with gas; but in either case the displaced part is to be found *in contact with the anterior abdominal wall*.

(3.) The occurrence of intra-abdominal tumor situated below the normal site of the transverse colon, and having the same general configuration as the colon, such tumor being of a certain consistency, and presenting evidences of being in contact with the anterior abdominal wall, or the occurrence of areas of special tympany with like outlines and similarly located, constitute diagnostic signs strongly indicative of downward displacement of the transverse colon.

A FATAL CASE OF INTERNAL URETHROTOMY.¹

BY GEORGE W. GAY, M. D.

MR. D., aged twenty-three years, conductor, had had more or less difficulty in passing his urine for two years, having been obliged on several occasions to resort to a catheter. October 16, 1883, he was again seized with retention, which repeated efforts at catheterization failed to relieve. The bladder was finally aspirated above the pubes, and the patient sent to the City Hospital.

During the next three days he passed a fair amount of urine, the bloody character of which was supposed to be due to lesions of the urethra. His treatment consisted in rest in bed, diuretics and diluents, fomentations to the hypogastrium, and complete rest to the urethra. As the patient seemed to be in good condition, and it was evident from his history and from his very sensitive urethra that some more radical treatment was necessary, he was etherized and examined on the 19th of October. Five inches from the meatus was a stricture, which admitted only a fine whalebone

¹ Read before the Surgical Section of the Suffolk District Medical Society, November 7, 1883.

bougie; upon this a tunneled sound was passed through the obstruction; with a urethrotome the stricture was then carefully cut and dilated till a No. 25 steel sound passed quite easily. The hæmorrhage was unimportant. The immediate after-treatment was morphine hypodermically, large doses of quinine, fomentations to perinæum and abdomen, and liquid diet.

About six hours after the operation the patient had a chill, and on the following day there was complete suppression of urine. He was pulseless, delirious, had vomiting, high temperature, and a congested skin. He was put on infusion of digitalis, squills, and acetate of potash; fomentations of digitalis leaves to the abdomen; gin and cream of tartar for a drink; food and stimulants by the rectum.

Two days later the urine began to flow, but the nervous symptoms were not improved. Free catharsis was produced with elaterium, when there was a temporary change for the better in that respect. It was of short duration, however, and in spite of hot-air baths and a fair secretion of urine he became comatose, gradually failed, and died six days after the operation.

The autopsy was made by Dr. Gannett, and his report is as follows:—

"The first five inches of the urethra from the meatus showed nothing unusual. The next two and a half inches, extending to the prostatic portion, showed numerous rents in the mucous membrane parallel to the course of the urethra. The mucous membrane was here of a reddish-brown color, and was covered with a shreddy, diphtheritic false membrane. The surrounding corpus spongiosum was indurated.

"The bladder contained about two ounces of a thick, blood-red fluid. The muscular walls were doubled in thickness. The mucous membrane thickened, velvety, of a reddish-black color, in portions covered with a diphtheritic false membrane and fine, gritty material.

"The mucous membrane of the pelvis of the kidney showed a few circumscribed patches of hæmorrhagic pyelitis. The kidneys were both enlarged, dark-red in color, with several opaque-gray lines extending from the cortex to the apices of the pyramids. Microscopically the kidneys showed cloudy swelling of the epithelium of the convoluted tubules, and extensive hæmorrhages into the tubules.

"The lesions were as follows: laceration of urethra, diphtheritic urethritis, hæmorrhagic-diphtheritic cystitis, pyelo-nephritis. Evidence of general septicæmia was found in the cloudy swelling of various organs."

Dr. Gannett's report, as well as the state of the organs shown you, prove that there was no extravasation, no abscess nor unusual inflammation about the seat of stricture; nor were the lesions consequent upon the operation more severe or more extensive than was to be expected. There were no false passages, no gangrenous patches nor sloughs in or about the urethra. There was simply a firm, dense stricture, which had been cut or torn (and from the local appearances no one could have told which); nor was there anything whatever to indicate that the operation had produced unusual violence, or had been followed by unusual local changes.

This patient died from acute pyelo-nephritis, septicæmia, and uræmia, the immediate and exciting cause of which was undoubtedly the operation. The predisposing causes were very probably the long-standing inflammation of the bladder and urethra, and the consequent irritation of the nervous system.

It may be said that this was a case for external rather than internal urethrotomy, and also that if less violence had been done to the urethra the result might have been different. I can only say that I have operated on a good many similar cases in precisely the same manner with good results. On the other hand, I once lost a strong and apparently healthy man from suppression of urine four days after a single and easy passage of a steel sound. Hence I cannot think that the fault was entirely in the operation.

RECENT PROGRESS IN OTOLOGY.

BY J. ORNE GREEN, M. D.

STATISTICS OF EAR DISEASE.

IN a painstaking article Bürkner¹ has brought together all of the statistics of ear diseases which he has been able to find, and analyzed and tabulated them as far as was possible. Although, like all figures, these give us but dry reading matter, they nevertheless, from the large number of cases, bring out many interesting facts. It should, however, be borne in mind that they are open to the objection of all similar medical statistics, in that the observations are made by many different persons of various degrees of ability, in many countries, and under various circumstances, so that we must hesitate to accept many of the tables as giving anything more than a distant approximation to the truth. For instance, under the causes of ear disease we find the percentage referred to scarlet fever, measles, small-pox, typhus, etc., given, but it is evident that unless such figures extended over many years for the same town, they would be somewhat variable, according to whether there had been epidemics of those diseases. Tables of results of treatment in public clinics are always open to doubt, if, for no other reason, on account of the difficulty of keeping the cases under observation for a length of time. Others of the tables are of undoubted value.

AGE.

Of 34,532 patients 22.4 per cent. were less than 15 years old.
Of 34,532 patients 59.3 per cent. were between 15 and 50 years old.
Of 34,532 patients 12.9 per cent. were over 50 years old.
Of 41,287 patients 77.8 per cent. were less than 15 years old.
Of 41,287 patients 22.2 per cent. were adults.

SEX.

Of 37,920 patients . . . 60.3 per cent. were men.
Of 37,920 patients . . . 39.7 per cent. were women.

PART OF EAR AFFECTED.

Of 58,645 patients . . . 25.5 per cent. external ear.
Of 58,645 patients . . . 66.9 per cent. middle ear.
Of 58,645 patients . . . 7.6 per cent. inner ear.

This table, from eighteen different sources, in comparison with the older tables of Wilde and Kramer, is interesting as showing the tendency of modern investigation to find disease in the middle ear, and is the direct result of pathological study and improved methods of examination. The same thing has been noticed in the study of eye diseases.

WILDE'S TABLE.

Of 2330 patients . . . 55.8 per cent. external ear.
Of 2330 patients . . . 39.5 per cent. middle ear.
Of 2330 patients . . . 4.9 per cent. inner ear.

¹ Archiv für Ohrenheilkunde, vol. xx., p. 81.