REPORT OF SEVEN OPERATIONS UPON THE GALL BLADDER OR ITS DUCTS.

Number. Initials. Residence.	Nat. Age. Sex.	In Consultation with.	Date and Place of Operations.	History.	Examination.	Operation.	Result.	Remarks.
1. E. B. B., Sleepy Eye, Minn.	Am. 36 M.	Hospital Staff.	Dec. 2, 1890. St. Mary's Hos- pital, Rochester.	Colics for several years; during last year continuous pain in right side. Has had to use mor- phia constantly.	Emaciated, sallow. Tumor in right hy- pogastrium.	Incision over tumor. Single stone. Gall bladder adherent.	R	Fistula closed in three weeks.
2. F. L., St. Charles, Minn.	Ger. 33 F.	Dr. Chamberlin, St. Charles, Minn.	June 24, 1891. St. Mary's Hospital.	Colics began nine days after child- birth, two years ago. Constant pain and frequent colics.	Indefinite tumor, and great tenderness in right hypogastrium.	Incision in right semi-lunaris. One large stone impact- ed in cystic duct.	R	Great difficulty was experienced in dis- lodging stone. Fis- tula healed in two weeks.
3. G. Z., Dover, Minn.	Ger. 28 F.	Dr. Dugan, Dover, Minn.	Feb. 3, 1892. St. Mary's Hospital.	Attacks of pain, with more or less jaun- dice during past year. Pain in pel- vis.	Liver very large. Small tumor in pel- vis.	Incision in R. S. No stone. Common duct blocked by ad- hesions which were torn loose. Incision in median line. Papillary cyst of ovary removed.	R	Patient improved greatly for six months. In nine months died from malignant papillo- ma of peritoneum.
4. E. J. D., Quincy Mills, Minn.	Am. 36 F.	Dr. Chamberlin, St. Charles, Minn.	Aug. 17, 1892. Home.	Hepatic colic for nineteen years. Two attacks of peritonit- is.	Patient jaundiced; vomiting; pulse 130, with symptoms of acute obstruction.	Gall bladder very ad- herent. Peritonitis. Ninety-six stones.	D	Patient died in a few hours. Operation lasted but twenty- five minutes.
5. S. A. H., Plainview, Minn.	Am. 57 F.	Dr. Waiste, Plainview.	August 29, 1892. St. Mary's Hospital.	Colics for seventeen years. Constant pain in right side.	Pain and tenderness in right hypogas- trium. No tumor.	Incision in R. semi- lunaris. Gall blad- der adherent. Fifty- six stones. Sutured to skin.	R	Fistula healed in four weeks.
6. C. S., Potsdam, Minn.	Ger. 56 F.	Dr. Adams, Elgin, Minn.	Dec. 6, 1892. St. Mary's Hospital.	Pain for six months. Tumor forming in right side two months.	Movable tumor in right hypogastrium. Empyema gall blad- der.	Incision over tumor. Siv pus evacuated. Sutured and drain'd	R	Fistula healed in three weeks.
7. W. H., Racine, Minn.	Am. 71 M.	Dr. Plummer, Hamilton, Minn.	April 6, 1893. St. Mary's Hospital.	Colics for two years. Jaundice for two months.	Great debility, chol- emia, white stools, etc.	Incision R. S. Blad- der deep. No stone. Obstruction in com- mon duct. Anas- tomosis by Murphy's button.	R	The bladder could not be brought to sur- face. Obstruction could not be re- moved. The Mur- phy button worked quickly, and re- lieved jaundice, etc.

because of the contents being often septic and the slight leakage setting up septic peritonitis.

Suture of the gall bladder after opening and removal of stones is seldom practiced and the method is condemned as unsafe. This, however, is not logical—the whole question of safety depends on the patency of the ducts. If there be no obstruction to the outflow, so that there will be no tension within the sac, suture and return is a safe procedure. Abbé tests the condition of the ducts by using a syringe and forcing water through them into the intestine; if the fluid passes freely he does not hesitate to trust to immediate suture and return.

The second general class is where the gall bladder is removed. Langenbeck first practiced cholecystectomy and formulated indications for its performance; he gives much too wide a scope to this procedure, and Greig Smith very properly limits its application to single or double stone, where the fundus of the gall bladder can not be sutured to the abdominal wall, or to cases wherein the tissues are too thin or inflamed to bear a suture. It is mainly practiced by a few continental surgeons and is not a popular operation.

The third class is a very important and often perplexing one—wherein obstruction exists either in the cystic or common duct. To suture such a gall bladder to the abdominal walls is to invite a permanent fistula; in any case an annoyance, and if complete obstruction of the common duct exists the escape of all the bile externally leads to debility and eventually death. Fortunately, the recent work of Mr. J. Knowlsley Thornton, Mr. Mayo Robinson, Robert Abbé and Charles McBurney has given us methods of opening these ducts and removing stones with either suture of the incised duct or drainage. The

latter distinguished surgeon has successfully opened the duodenum and shelled an impacted stone out of the intestinal orifice of the common duct. There will remain certain cases in which the obstruction in the ducts can not be removed, and in these cases entero-cholecystotomy is our only hope of success. Winiwater first sutured the gall bladder to the colon; while this was much better than an external fistula, yet most of the physiological effect of the bile in digestion was lost. Gaston of Georgia, by experiments upon dogs developed a complicated method of suture to the duodenum; but it remained for a brilliant young Western surgeon, J. B. Murphy, to invent his mechanical device by means of which an effectual back door for the escape of bile into the duodenum can be safely and quickly made. In conclusion, I append a diagrammatic report of seven cases in which I have operated upon the gall bladder or its ducts.

SPECIMENS DEMONSTRATING THE OPERATION OF GASTRO-CHOLECYSTOTOMY, END-TO-END ANASTOMOSIS OF GUT, AND THE CONNECTING OF THE GALL BLADDER WITH THE ALIMENTARY TRACT.

AS PERFORMED WITH THE MURPHY BUTTON, AND BY THE MAUNSELL OPERATION.

Read before the Section on Surgery and Anatomy at the Forty-fourth Annual Meeting of the American Medical Association.

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CINCINNATI, O.

I am sorry, indeed, that circumstances would not permit of my being with you this morning as an-

nounced on the program. However, I must content myself with the time allotted to me this afternoon, a duly appreciated courtesy granted by the chairman. Dr. Murphy having demonstrated his gall bladder operation upon the dog prevents me from making anything more than a passing remark upon this operation. However, I wish to speak more fully upon the various other anastomoses.

No. 1.

That I might simplify matters both in my remarks and demonstrations I have, with the assistance of an artist been able to give charts that are more instructive than words.

No. 2.

Six of these fully illustrate an end-to-end anastomosis, while four show the operation upon the stomach as suggested by Maunsell of New Zealand, some eleven years ago, but which was not published and made known until one year ago.

No. 3.

No. 4.

Although I have operated frequently upon the dog in this manner, I know of no person except Dr. Frank Hartley of New York, who has made the operation upon the human being. This Dr. Hartley did in the month of May, 1892, for carcinoma of the gut.

No. 5.

He informed me last November while I was in New York that the patient (a man) was living and doing well at that time. I suppose that we will hear from Dr. Hartley concerning this case.

No. 6.

This operation, when understood, can be made by the average practitioner without much preparation; all that is needed being a knife, scissors, needle and thread.

Fig. A.

With this, as with all other devices for anastomosis, greater difficulty is experienced in gut of small caliber, and I find less difficulty in making connec-

tions with the dog's gut as it approaches the caliber of the average human alimentary tract.

Fig. B.

My work with the Murphy button has been very satisfactory indeed, but the Murphy button is not and will not be found in the possession of 10 per cent. of the practitioners. Then, too, there is noth-

Fig. C.

ing left within the alimentary tract to jeopardize the life of the patient in its passage through that tract. Having not seen Mr. Maunsell's description of the

operation, and having depended upon a short statement and one illustration, I have been left to learn of the operation through personal experimentation. I have thoroughly satisfied myself by this means, together with the statements by Dr. Hartley, that his operation was a success, and I am now ready to recommend it as one of the best means we have for the various anastomoses within the abdominal cavity.

No. 1 represents ends to be united.

No. 2 represents the ends of the fixation sutures, which have been drawn through the opening made in the gut for the purpose of invagination. These are the sutures that are removed after invagination has been produced, because the knots are on the peritoneal surface.

No. 3 represents the sutured ends drawn through the opening, and fixation sutures just before removal.

No. 4 represents completion of suturing, all the knots of which are on mucous side.

No. 5 shows partial reduction of invagination and stage of operation when ends of sutures are cut.

No. 6 shows appearance of gut after reduction and suturing the opening purposely made for invagination, also that the knots of sutures are within.

Fig. D.

Connection with the stomach is accomplished by making two incisions in that organ, as shown in Figs. a, b, c and d. The object is to insert the smaller into the larger one.

I am sorry that my remarks are so limited, but I feel that, together with the diagrams, enough has been said to fully illustrate the operation.

Medical Detectivism.—Dr. Conan Doyle's tales of detective acumen has made famous one of his medical teachers in the University of Edinburgh. The latest paragraph about Dr. Bell is the following:

"Professor Joseph Bell of Edinburgh is the original of Sherlock Holmes. Some years ago Professor Bell was medical examiner for an insurance company and an Edinburgh man presented himself for examination. After the victim had stripped to the waist, the professor poked him in the ribs and said:—"You have belonged to the Volunteers?" The gentleman admitted that was the fact, but said his volunteering had been done years before. It seems that certain muscles are developed by a military life, and that the professor knowing the man was not a soldier, and seeing those muscles developed on his body, at once jumped to the correct conclusion that he had been a Volunteer."