Selected Abstracts

Complication of Appendectomy; an Analysis of 1000 Patients(Complicationes de la apendicectomia; A proposito de 1.000 casos). Cesar Armand Ugon, Dante Parma, Carlos Antunez and Heber Otazu. Cir. Uruguay, 1980, 50: 308.

A detailed classification of the possible complications of appendectomy is presented. In an analysis of 1,000 appendectomies, 20.68 per cent of patients did not in fact have an acute appendicitis. Of these patients, one-third had no demonstrable intra-abdominal disease while two-thirds had some pathologic process in an organ other than the appendix, generally gynecologic, in about one-half of the patients. Eight patients died after operation. The important causes were pulmonary thromboembolism or sepsis. All of these patients were over 40 years of age and some were senile. Two hundred and eighty-eight patients had concomitant peritonitis, 148 localized and 140 generalised. Drainage was instituted in 268 patients, locally in 108, in the pelvis in 86, both in 70 and subhepatic in four. One hundred and sixty-one patients had the incision left open, all layers in one, skin only in the rest.

Twenty-one per cent or 210 patients had postoperative complications, 63.8 per cent of these had some infective process, parietal or intraperitoneal, 4.2 per cent had post-operative ileus and 1.2 per cent, all with McBurney or McBurneyGosset incisions, had wound dehiscence. Other complications included cecal fistula, 1 per cent, wound hematoma, 0.6 per cent, late intestinal obstruction, 0.6 per cent and one patient had a hemorrhagic diathesis and suffered an intraperitoneal hemorrhage.

-Ranes C. Chakravorty

Complications of Gastrointestinal Endoscopy. Morton A. Meyers, Mt. Sinai J. Med. N.Y.

The American Society of Gastrointestinal Endoscopy has shown complication rates of 1.32/1,000 patients for peroral endoscopic examinations. The recent use of fiberoptic endoscopy has produced a higher number of perforations and mortality. Fiberoptic esophagoscopy causes a perforation ratio of 0.1 per cent. The risk is greater if the esophageal wall is abnormal. Lateral neck films, esophagography and roentgenograms of the chest are important in the diagnosis of these complications. The areas most commonly involved are the cervical esophagüTs, the narrowing at the aortic knob area and the lower one-third of the esophagus. The most. common area of gastric perforation is the lesser sac posteriorly. Continuous gastric aspiration and antibiotics are generally preferable to emergency laporotomy. Pseudoacute abdomen following gastroscopy can be produced by introducing large amounts of air, leading to considerable gaseous distension of the small intestine.

Submandibular and parotid swelling is an unusual finding. Aspiration pneumonia produced by delayed clearing of contrast material from the hypopharynx has also been seen. Hematemesis may be associated with perforation. A bleeding diathesis, acute phlegmonous and corrosive esop hagitis and gastroesophageal var ices are contraindications to biopsy.

Several complications . have been produced by colonoscopy. The most common affected area is the colon, since only the rectum can be negotiated through direct vision. The most common complication of colonoscopy is performation, 0.22 per cent. Colonoscopic polypectomy resulted in perforation in 0.29 per cent of patients. Mural perforation can occur in the rectosigmoid and the junction of the sigmoid and descending colon. Insuflation of gas to facilitate passage of the colonoscope may cause massive and prolonged dilation of the small intestine in patients with a patulous ileocecal valve.

-Elmer R. Cano

Total Colectomy and ileorectal Anastomosis; a Plea for Surgical Treatment of Ulcerative Colitis in the Young. Stanley 0. Aylett. J.R.Coll. Surg. Edinb., 1981, 26 : 28.

This is the Alex Simpson Smith Lecture for 1978 delivered at the Institute of Child Health, University of London. The surgical theme of the lecture is that total colectomy and ileorectal anast omosis, as opposed to panproctocolectomy, should be the method of choice in the treatment of ulcerative colitis when operation has to be undertaken for its cure, particularly in young patients. The author's opposition to total removal of the colon and the formation of a permanent ileostomy is based on the following thoughts. First, the cure of the condition seldom requires ablation of the rectum. Second, the psychologic effect of having an ileostomy for a young patient can be devastating. Third, sexual disorders varying from failure of ejaculation to total impotence following excision of the rectum in panproctocolectomy occur more frequently than is usually appreciated.
-Gordon L. Kauffman, Jr.

Local Treatment (Electrocoagulation) for Carcinoma of the Rectum in the Elderly. Bruce S.Gingold. J. Am. Geriatr. Soc., 1981, 29 : 10.
For more than 70 years, surgical excision with permanent colostomy has been the most common operation for adenocarcinoma of the rectum. Local treatment has been advocated by some surgeons, but most prefer radical operation. Abdominoperitoneal resection often diminishes the risk of local recurrence, but mortality and morbidity rates are very high, especially in the elderly. Although local treatment for carcinoma of the rectum remains controversial, it is believed that the elderly constitute a separate category of patients because their mortality and morbidity rates are high and because they usually are unable to care for a colostomy.
Local treatment seems a much more desirable form of therapy. A series of six elderly patients whose average age was 77 years, were treated by local electrocoagulation followed by radiation therapy, for biopsy proved adenocarcinoma of the rectum. One patient died after nine months from metastases to the liver, present at the time of diagnosis and one bad to undergo a colostomy after 19 months. For the four remaining patients, follow-up examinations have ranged from three years to nine months. To date there has been no recurrence, no evidence of metastases and no mortality or morbidity. The results of electrocoagulation-radiation treatment of small adenocarcinomas of the rectum are superior to the results of radical operation in elderly patients.
-Robert .J. Cap ehart

Peptic Ulceration and Sigmoid Volvulus in India. John A. Rennie. Ann. R. CoiL Surg. EngL, 1981, 63 : 105.
The Results of operation in 126 patients with benign peptic ulceration and 57 patients with sigmoid volvulus presenting at a hospital in North India are discussed. In patients with peptic ulcer, 92 per cent were duodenal ulcers and 8 per cent were gastric ulcers. Sixty-two per cent of the patients had evidence of sclerosis and gastric distention and were treated by truncal vagotomy and gastroenterostomy. Others were treated with truncal vagotomy and pyloroplasty. Ten patients with duodenal ulcer presented with perforation; these were oversewn, patched and drained. Gastric ulcer was treated with gastrectomy of oversewing when perforated. The ratio of duodenal ulcer to gastric ulcer in 1 2 to1 in India compared to 2 to 1 in the West. It is not clear why stenosis is the main complication of duodenal ulcer in this series.
Gangrenous sigmoid volvulus in patients was mainly treated by resection and immediate anastomosis while non-gangrenous volvulus was treated by colopexy. Dietary causes are suggested as the most important etiologic factors in both conditions, although certain anatomical peculiarities may contribute to sigmoid volvulus.
-Gordon L., Kauffman, Jr

Surgical Treatment of Obesity (Traitement chirurgical de lobesite) M.Van Baden G. Geulemans, L. Lemmens and others. Lyon Chir., 1981,77:27.

Operation is not the method of choice in the treatment of obesity. In selected patients, an operation can help ameliorate their psychic and physiologic problems. Many techniques of intestinal short circuit have been described. Since 1970, 62 patients were operated upon, 13 men and 49 women. These patients were observed postoperatively and form the basis of this study.
The operations performed were as follows: 36 terminolateral jejunoileostomy, the proximal end of the small gut being left blind; 26 end-to-end jejunoileostomy, with the excluded end implanted into the sigmoid colon; and four gastric stapling with the jejunum anastomosed to the small gastric reservoir. The dimensions of the excluded or functioning segments are not detailed in the article.
At most, 35, per cent of the preoperative weight may be lost. In the 56 patients in this series, the average decrease was 25 per cent of the original weight. Initially, all patients lost weight rapidly. but this slowed after six months and stabilized after two years unless the patient also restricted the diet. Pre-existent respiratory insufficiency, diabetes or hypertension generally improved with the reduction of weight. Though there were many episodes of electrolytic imbalance, the changes were not permanent. The serum cholesterol generally stablized just below the lower limit of normal while the serum lipids and triglycerides stablized just above the lower limits. Patients with diabetes usually showed a flattening of the glucose tolerance curve.
Immediate complications were rare and not serious. However, late complications and unpleasant sequelas were frequent. Particularly common was persistent or recurring diarrhea seen in 27 of the 47 patients who underwent short circuit operations. Twenty-three of the 56 patients, 41 per cent, had to be rehospitalized a total of 58 times for observation and conservative treatment. Thirty-eight patients had to be reoperated upon for problems connected with the short circuiting. Three patients died, two of hepatic failure from postoperative cirrhosis 11 months and two years following short circuit. The third patient was reoperated upon for intestinal obstruction a year after the initial operation and the entire excluded gut was found to have necrosed.
Of these patients, 26.3 per cent had an excellent result in that there were no major postoperative complications and the initial weight decreased by 25 per cent or more. A satisfactory result occurred in 23.6 per cent of patients; the weight loss was more than 25 per cent but the patient had suffeied a complication necessitating hospitalization. One half, 50.1 per cent, patients had an unsatisfactory outcome. Their postoperative weight was more than 75 per cent of their initial weight and they had had more than one hospitalization. The four recent patients who underwent gastric bypass have had a more satisfactory postoperative course. However, their period of postoperative observation is as yet too short for proper assessment.
-Ranes C. Chakravoriy

Colorectal Cancer and Schistosomiasis. Chen Ming. Ming-chai, Chang pei-yu, Chuang Can-yuan and others. Lancet, 1981, 1: 1971.
Patients with long standing schistosomal colitis are known to be predisposed to have carcinoma of the colon and rectum develop. In this retrospective review of 60 Chinese patients who underwent operation for schistosomal colitis of two to 20 years duration, histologic examination of the specimen demonstrated epithelial dysplasia in 36 patients, four of whom were sufficiently severe to be considered equivalent to having in-situ carcinoma.
This dysplastic epithelium occurred in flat mucosa as well as in pseudopolyps and at the edge of ulcers. Since epithelial dysplasia in chronic ulcerative colitis is considered changes imply the same malignant prognostic significance in schistosomal colitis.
-Elias Jacobs

Malignancy in Crohn's Disease. S.N. Gyde, P. Prior, J.C. Macartnéy and others. Gut, 1980, 21: 1024.
Cancer morbidity has been evaluated in a series of 513 patients with Crohn's disease under long term

review between 1944 and 1976. In comparison with morbidity rates for cancer in the West Midlands Region, the geographical area from which these patients were drawn, the 31 tumors that occurred represented a relative risk of I to 7, P<0.01, of cancer at all sites. For tumors at sites within the digestive system, the relative risk was 3 to 3, P<0.00l. A significant excess of tumors were found in both the upper, P<0.01 and lower, P< 0.001, gastrointestinal tract. There was no excess of tumors at any site outside the digestive system.
-RobertJ. Capehart

Intraoperative Gastrointestinal Endoscopy. Taimadge A. Bowden, Jr. Vendle II. Hooks III, and Arlie R. Mansherger, Jr. Ann. &irg., 1980, 191 : 680.
The Article recounts the use of flexible fiheToptic endoscopy intraoperatively. Over trie past four years it has been performed upon 30 patients. In 28 instances the technique was of benefit. In general the technique was used in difficult gastrointestinal surgical problems to locate the site of bleeding of obscure cause, to diagnose at biopsy, when appropriate, resect lesions during operations conducted for other pathologic processes and for the enhancement of diagnosis at the time of diagnostic laparotomy. Similarly, it has been used to guide the operating surgeon to an area of resectable pathology. Its predictable limitations include massive hemorrhage with blood obscuring the intestinal lumen and dense adhesions. There were no complications reported from the use of intraoperative flexible fiberoptic endoscopy.
-Robert P. Davis

Test to Help Diagnosis of Rupture in the Injured Duodenum. Sheldon Brotman, Steven Cisternino, Roy A.M. Myers and R. Adams Cowley. Injury, 1981,12 :464.
Two patients with duodenal injury are presented to show the difficulty in diagnosis, as well as to suggest a method for the intraoperative delineation of the injury. Even after the duodenum has been fully mobilized, identification of a duodenal leak may prove to be quite difficult because of tissue trauma and staining from blood and bile.
It was suggested that in all patients that methylene blue be administered through a nasogastric tube. The presence of blue-green dye in the right upper quadrant is a sure sign of leak. Once demonstrated, the leak must be carefully closed and drained.
-Martin J. Fischer

Chronic Primary Intestinal Pseudo-Obstruction. John B. Hanks, William C. Meyers, Dana K. Andersen and others. Surgery, 1981, 89 : 175.
Chronic primary intestinal pseudo-obstruction has received increasing attention in spite of its unclear causal characteristics and infrequent occurrence. Recently a patient with this disorder had evidence of a primary visceral neuropathy. Reviewing the literature, 30 patients with chronic primary intestinal pseudo-obstruction were evaluated for clinicopathologic findings.
Presenting symptoms and roentgenographic findings were nonspecific. Esophageal notiity was abnormal in 12 of 14 patients. Intestinal histopathologic features revealed normal muscle wall, mucosa and ganglion cells in over 50 per cent of patients. Only 48 per cent of patients demonstrated clinical improvement. Thirty per cent, eight of 30 patients, ultimately died.
It was concluded that chronic primary intestinal pseudo-obstruction is a perplexing, often fatal entity that can mimic mechanical obstruction in the absence of definite causal characteristics. Primary neurologic or muscular disease may be a possible explanation, but, as yet, definite documentation does not exist.
-Robert J. Cçpeharl

Coagulum Choledocholithotomy; a Preliminary Report. Philip B. Wels, Miguel A. Rainstein and

Andrew S. Heller. Surgery, 1981, 89: 192.
The Technique developed by Dees in 1943 for removal of kidney pelvis stones was used by the authors to successfully extract common duct stones from 17 dogs and three patients. The technique involved injecting a coagulable substance, either human cryoprecipitate and a mixture of bovin thrombin and lu per cent calcium chloride in the dogs or in the human fibrinogen and thrombin through two separate syringes, into the duct lumen. After a seven minute lapse, a choledochotomy is performed and the clot which contained the stones was extracted.
A report of a 60 year old female patient with obstructive jaundice is presented. Two common duct stones near the ampula were extracted by the coagulum choledocholithotomy technique. Postoperatively, the patient did well. The I-tube cholangiogram showed free flow of dye into the duodenum and no retained stool.
-E Wesner Fleuranl

Insulinoma; Light and Electron Microscopic Study of 65 Cases. Liu Tonghua, Zeng Xianjiy (Tseng Hsien-chu), Zhu Yu and Wu Weiran. Chinese Med. J., 1981,94:21.
The pathologic features of 65 patients with insulinomas were described, including electron microscopic studies in six recent patients. Tumors were successfully removed by surgical intervention in 64 patients and in one patient the tumor was discovered at patients and in one patient the tumor was discovered at autopsy. Fifty-five patients were men and ten patients were women. Their ages ranged from 13 to 54 years with an average age of 35 years old. The tumor was solitary in 61 patients and multiple, 2 to 14, in four patients. The total number of tumors was 85.
The anatomical sites of these 85 tumors were : 28 in the head and uncinate, 24 in the body, 31 in the tail and 2 beyond the tail of the pancreas. Most of the tumors were round or oval in shape and well circumscribed with or without encapsulation. The size of tumors ranged from 0.2 to 11 cm. in diameter. Tumor cells were more or less similar to normal islet cells in shape and size and were arranged in various patterns. They had round or oval shape vesicular nuclei. Nuclear pleomorphism was prominent in a majority of the tumors, but mitosis was sparse or not detected. Twenty-five tumors, 24 patients, had varying degrees of amyloid deposition in stroma. Psammoma bodies were present in 10 tumors in ten patients. Ductular structures were present in 43 tumors, 42 patients. Although most tumors were circumscribed grossly, 52.9 per cent, 45 tumors, did not show any capsule under microscope. Extensive stromal fibrosis, calcification or amyloid deposition did not ameliorate the function of the tumor, nor did the size of the tumor have any influence on the severity of symptoms. All six tumors that were examined under electron microscope revealed typical beta cell secretory granules, but the amount of granules varied greatly from tumor to tumor and between the different parts of the same tumor. An inverse relationship seemed to exist between the number of secretory granules in the individual neoplastic cell the predominence of endoplasmic reticulum, swollen mitochondria and the severity of clinical syndrome. deposits displayed irregular masses of fine fibrils arraying in random orientation or forming bundles.
Among the six tumors that were examined by electron microscope, one had extensive amyloid deposition in stroma. The amyloid deposits displayed irregular masses of fine fibrils arraying in randomorientation or forming bundles None of the patients displayed lymph node or organ metastasis. Twenty-three patients had some features of borderline carcinoma, that is, invasion of blood vessels, capsule, extrapancreatic nerve or fatty tissue, prominent nuclear pleomorphism and presence of mitosis. Six patients were operated upon recently, while the other 17 patients have been observed for 2.3 to 16.5 years, average 8.5 years, and all are alive and well. These findings indicate that the presence of metastasis is the only reliable sign of a malignant condition in insulinoma.
-You-Sah Kim

Gallbladder Injuries Resulting from Blunt Abdominal Trauma; an Experience and Review. Cari.

A. Soderstrom, Kazuhko Maekawa, Robert W.Dupniest, Jr., and R. Adams Cowley. Ann. Surg., 1981, 1983 :60.

The Article presents 31 patients with injuries to the gallbladder sustained from a blunt abdominal trauma. Thirty.one patients were identified; all of whom had gallbladder injuries discovered at laparotomy. Sixty-five per cent of the injuries were contusions,. 32 per cent were avulsions of more than just a minor degree and 3 per cent were lacerations. Only one patient had injury to the gallbladder as his only intra-abdominal injury. There was no increase in morbidity or mortality directly related to injuries to the gallbladder and, specifically, there were no patients in their series who had the delayed rupture develop. One patient had a cholecystostomy because of obscuration of the anatomy from the common duct. The rest of the patients had cholecystectomy. There were no problems with this approach and all of the patients did well from this aspect of their operative procedure.

The world literature was also reviewed, including historic development of traumatic gallbladder operation. It was concluded that most patients with delayed rupture are actually patients with missed perforation or, at least , missed mucosal tear. It was also concluded that cholecystectomy is the treatment of choice.

-William E. Gotthold