GENERAL ABSTRACTS

TUTTLE, E.: *Intracellular biochemical adaption process therapy theory.* Rev. Gastroenter. 20, 12, 893-912. Dec. 1953.

Employing the biochemical blood values as indicators of the biochemical dysfunctions associated with pathological conditions, an attempt is made to postulate the Process Therapy Theory as to the etiological factors responsible for the chronic progressive diseases of nutritional origin.

Clinical experience, supported by blood biochemical studies, are presented to throw further light on the pathology of atherosclerosis, and the factors which may be precursers of its origin. That atherosclerosis in the young may be reversible when detected early is indicated. The liver and pancreas are shown to exert influence on cellular metabolism. Biochemists are in general accord in the belief that steroid hormones act indirectly on the metabolic processes by their direct influences on the enzyme system. Their catalytic properties are by way of effecting the rates of transfer of energy and their role as chemical regulators in the intermediary cellular metabolic oxidations is a major factor.

The equilibria are maintained, in the author's estimation, by the phosphorylation mechanisms resulting from the adenylic acid systems and directly to nucleic acid. Therefore, the Process Therapy Theory holds the key to the factors at fault since it is concerned with the equilibria and properties of living cells composing the tissues and organs of the body as it relates to growth, maintenance and repair of the living body as a whole.

Franz J. Lust.

MELLINS, HARRY Z. AND RIGLER, LEO G.: *Roentgen findings in strangulating obstructions of the small intestine.* Am. J. Roentg. 71, 404. March 1954.

The earlier diagnosis of strangulating obstructions represents one of the most effective ways of lowering the current mortality rate of small intestinal obstruction. Roentgenologic evidence of strangulating obstruction can assist very appreciably in the early diagnosis. The roentgen signs are dependent upon the presence of a closed loop of intestine distended by either gas or fluid giving evidence of a fixed position. 26 cases are reported and the following signs should lead to a diagnosis:

1)The coffee-bean shadow. 2) The "pseudo-tumor" shadow. 3) Fixation of the loop of intestine. 4) Loss of the normal mucous membrane pattern within the closed loop or above. Additional signs of collateral value are: 5) Absence of small intestinal gas in a case suspected clinically of small intestinal obstruction. 6) The presence of unusually large amounts of fluid in the lumen of the small intestine. 7) Long fluid levels far beyond the usual size. 8) Distention of a segment of the intestine far out of proportion to the remaining loops. 9) Absence of decompression of a localized loop following suction siphonage. 10) The presence of moderate amounts of gas in the colon despite the apparent evidences of small intestinal obstruction.

Franz J. Lust.

STEVENSON, C. A. AND WILSON, M.: *Indications for the double contrast colon examination.* Am. J. Roentgen. 71, 398. March 1954.

In 1000 patients the examination with the double contrast method revealed unsuspected polyps in only 0.4%. Since the ascending colon was inadequately visualized in 20% of these patients, it was apparent that the double contrast examination should not be used as a routine procedure because of the possibility of missing a lesion of the terminal ileum, cecum, or ascending colon. When the referring physician indicates the possibility of disease of the terminal ileum, right colon, or inflammatory disease, then complete roentgenoscopy, and roentgenograms before and after evacuation are indicated. All other patients may be examined by the double contrast method but it is necessary to adequately visualize the cecum and ascending colon. Re-examination will be necessary in about 20%. As far as polyps are concerned the double contrast examination will produce a diagnostic yield of about 5% in all patients who have any type of rectal bleeding, polyps found at proctoscopic examination, or a history of polyps previously found or removed.

Franz J. Lust.

SCHOLEFIELD, G. L. M.: *Post gastrectomy syndromes.* New Zealand Med. J., LIII, 293, Feb. 1954, 39-46.

The dumping syndrome occurs in 4.7 percent of cases and is due to distention of the jejunal loops as a result of rapid emptying of the stomach, and is best treated by eating small meals and resting after meals. Loss of weight is a disturbing result of the operation. It occurs in 24.3 percent of cases and is considered to be caused by faulty absorption due to the rapid passage of food through the small intestine. Hypoglycemic attacks are less common, but when present, they are a late manifestation, occurring 2 to 4 hours after meals. In the author's experience, such attacks did not occur at all. Microcytic anemia occurred in 10.6 percent of cases; macrocytic anemia is extremely rare. The functional results of the operation were excellent in 76 percent of males and in 44.4 percent of females. (Note —some English surgeons hesitate to perform gastrectomy on women).

POPPEL, M. H.: *The roentgen manifestations of relapsing pancreatitis.* Radiology, 62, 4, April 1954, 514-521.

While there are several possible x-ray manifestations of pancreatitis, one of the best is the swollen papilla of Vater which, in acute or subacute cases frequently may be visualized as a small "mound" on the inside of the second portion of the duodenum. In chronic pancreatitis the finding of calcareous deposits in the

region of the pancreas is suggestive. An abscess may show a fluid level if it contains fluid and gas.

TONDREAU, R. L.: *Multiple primary carcinomas of the large intestine.* Am. J. Roentgen., Rad. Ther. and Nuclear Med., 71, 5, May 1954, 794-807.

Multiple cancers of the colon are not rare and may be simultaneous or not simultaneous. A person who has one cancer is more likely to develop a second lesion than a person who has never had malignant disease. In simultaneous multiple cancers of the colon, 75 percent of them are located in the rectum or sigmoid, but in those which are not simultaneous, 50 percent are located in the cecum, ascending and transverse colon. Discovery of one cancer should always lead to a diligent search for others. Those who have had resection of the colon for cancer should be followed at intervals for the rest of their lives. The prognosis of new lesions is far better than that of *recurrent* malignant tumors.

GUNZ, F. W., GEBBIE, L. D. AND DICK, R. C. S.: *Treatment of acute gastroduodenal hemorrhage, with particular reference to quantitative blood replacement.* Brit. Med. J., April 24, 1954, 950-956.

The authors describe a satisfactory method of treating acute hemorrhage from ulcer by means of the *complete* replacement of the lost blood in all patients, plus emergency surgical operation in selected cases. The aim is to restore the total red-cell mass by means of transfusion. They assume that a pint bottle of stored blood contains 200 to 230 c.c. of red cells. So if they found a deficit of 1000 c.c. in the total red cell mass, they would give 4 to 5 pints of whole blood. This method led to a 50 percent reduction in mortality.

DEARLOVE, T. P.: *Diverticulitis and diverticulosis, with report of a rare complication.* Med. J. Australia, Mar. 27, 1954, 470-475.

In 3 cases reported from the literature and in one case of the author's, metastatic abscesses secondary to a diverticulitis were found. In all 4 cases the presenting symptoms were unexplained fever, rigors and leucocytosis. In each case the localizing signs were insufficient to establish a pre-mortem diagnosis. Certainly, in cases presenting fever of unknown origin, the possibility of metastatic abscess from a diverticulitis should be kept in mind. In the author's case the metastatic abscess occurred in the liver.

PHILLIPS, R., KARNOFSKY, D. A., HAMILTON, L. D. AND NICKSON, J. J.: *Roentgen therapy of hepatic metastases.* Am. J. Roentgen., Rad. Ther. and Nuclear Med., 71, 5, May 1954, 826-834.

Thirty-six patients were treated by x-radiation or nitrogen mustard for liver metastases following cancer of the breast, bronchus and gastrointestinal tract and 26 of these patients showed symptomatic improvement. The liver size decreased, and appetite returned, pain lessened, weight increased, and liver function tests improved. 22 cases received supervoltage roentgen therapy, 14 cases each received a single intravenous dose of nitrogen mustard (0.4 mg. per kilo of body weight). No evidence of liver damage was observed but dose levels of 3,500r and 3,750r carry a risk of damage to the gastrointestinal mucosa, especially the transverse colon.

LEONARD, P.: *Galactose function test sensitized by prior histamine injection.* Acta Gastro. Beligica 17, 1, 27. Jan. 54.

The galactose tolerance test after histamine injection, in the author's mind, is able 1) to demonstrate the role of the liver in allergy: an important reduction of the galactose excretion is related to an exaltation of the hepatic cell; 2) to discover reactional jaundices or latent hepatitis.

Histamine appears to act essentially by dilatating the hepatic blood vessels, affecting thus the reactive power of the hepatic cell.

Franz J. Lust.

BALLANCE, G. A.: *Epidemic of infective hepatitis in an Oxford College.* Brit. Med. J., May 8, 1954, 1071-1074.

During the summer of 1950 an explosive outbreak of infective hepatitis took place in one of the smaller Oxford colleges. The total number of cases was 52. Forty-nine occurred within a period of 20 days and comprised the main wave of the epidemic, and 3, occurring later, constituted a minor secondary wave.

Evidence was obtained from which it was reasonable to deduce that this was a food-borne epidemic, the vehicle of infection having been custard that was served at a dinner and a lunch on consecutive specified dates. No certain source of contamination of the custard was ever discovered. The attack rate among those exposed to infection at the two meals was about 1 in 3, and the incubation period ranged between 23 and 42 days. A histogram constructed from the number of cases occurring each day shows an approximately symmetrical distribution about a single peak, and corresponds to a mean incubation period of 30½ days with a standard deviation of 3½ days.

The epidemic showed no unusual clinical features. In most cases the pre-icteric stage consisted of a well-marked febrile episode. No cases of hepatitis, without obvious bile-staining of the skin or urine, were detected with certainty. The icteric stage varied greatly in severity and duration. Convalescence was frequently prolonged. There was a relapse rate of 4%.

CHAKRAVARTZ, N.: *Some factors influencing the mortality in cholera.* Calcutta M. J., 51, 2, Feb. 1954, 41-47.

Mortality increases in cholera with the age of the patient and the virulence of the infecting strain. All cases require intravenous saline to combat dehydration. Sulfaguanidine actually seemed to increase the mortality rate. Best results were obtained from the use of Terramycin.

BRITTEN, S. A.: *Incidence of infectious hepatitis in the Navy.* U. S. Armed Forces Med. J., V, 5, May 1954, 648-657.

The data presented from statistical records of patients admitted for infectious hepatitis in 1951 support the findings of others that the disease usually appears among young persons introduced into an area where the virus is widespread and where certain of the conditions for natural transmission are fulfilled. No defi-

nite evidence of sharply circumscribed epidemics due to a common source was uncovered.

Although incidence rates for older persons with many years of service were relatively low, it is evident that large numbers of young men were still susceptible to hepatitis after two to seven years of service. Incidence rates for Medical Department personnel, due to their exposure to patients, were about twice as high as the average. Marine Corps enlisted personnel had a higher rate than average, related, in a large part, to duty in Korea.

The high rates for firemen and cooks are not readily explained. The importance of the latter group as potential sources of outbreaks was emphasized, but no evidence was found that they had in fact acted as such sources during 1951. Further information is needed to explain the higher incidence rates noted among enlisted cooks and firemen.

After analyzing the data according to geographic location (ashore or afloat), category of personnel, season of the year, and length of service, no basis for selection of personnel for mass prophylaxis with gamma globulin could be suggested that would have materially reduced the total incidence of hepatitis without requiring large amounts of that scarce and expensive material. Should the experience of 1951 prove to be typical, it is suggested that gamma globulin might well be reserved for mass prophylaxis for (1) forces entering a highly endemic area on a mission of great tactical importance, (2) the passive immunization of intimate contacts such as family groups, (3) persons caring for hepatitis patients under conditions where communicable disease technics cannot be employed, and (4) the control of local epidemics of unusual extent.

SMITH, C. H. AND MALKIEWICZ, G. M.: *Relief of severe pruritus ani by presacral neurectomy.* U. S. Armed Forces Medical Jour., V, 6, June 1954, 894-897.

Resection of the presacral nerves according to the technique of Adson and Masson was done in a case of very severe pruritus ani which had resisted all ordinary modes of treatment. Complete relief was immediate, and one month following operation no recurrence was noted. Evaluation of the operation will require time, at least two years. Should the benefits prove permanent, a new and effective procedure will have been added to our armamentarium, especially for those intractable cases which fail to respond to the usual remedies. A preliminary blocking of the presacral nerves with piperocaine hydrochloride, in this case, resulted in temporary but indisputable relief of the perianal itching. This blocking may prove to be a useful means of selecting patients for operation. Further search of the literature revealed that a French gynecologist, Cotte, had done this operation on 2 men for pruritus ani, complete relief being obtained in one case for 3 years, and in the other for 3 weeks.

PEIRCE, A. W.: *Carotene and vitamin A in human fat.* Med. J. Australia, April 17, 1954, 589.

Careful analysis of human fat for carotene and vitamin A indicated that carotene is resorbed with difficulty from subcutaneous fat deposits, and it is doubtful if it can be utilized by the body even if it is resorbed. So far as is known, the only tissue in the body which can convert carotene into vitamin A is the small bowel mucosa. Any digested carotene which escapes conversion to vitamin A at this site and is subsequently deposited, as for example in the liver or the adipose tissue, apparently will thereafter be lost to the body. If this postulate is correct, the color of human fat, while of general interest, has but little physiological significance.

WILSON, T. E.: *Pancreatico-duodenectomy for relapsing pancreatitis.* Brit. Med. J., May 29, 1954.

Wilson reports a successful operation of pancreaticoduodenectomy for relapsing pancreatitis. He feels such an operation is justifiable when other methods of treatment fail to give the patient ease from pain. The serum diastase was elevated. Following operation no complications occurred, nor did the patient require either insulin or pancreatin.

LANCASTER, H. O.: *The mortality in Australia from cancers of the alimentary system.* Med. J. Australia. May 16, 1954, 744-749.

The author reports deaths from cancer of the alimentary tract and liver, in Australia, for 5 periods over the years from 1908 to 1945. Except for cancer of the intestines and of the liver, all these cancers have a heavier incidence in the male sex. Declines are reported for cancer of the mouth and liver, but pronounced increases have occurred in mortality from esophageal cancer. Deaths from cancer of the stomach and duodenum have remained fairly constant at the higher ages since 1920, with some reduction at the lower ages. Death rates from carcinoma of the intestines and rectum have increased. The increase in the other cancers is greatly in excess of what can be explained by a transfer of cancer of the liver to the primary site in later periods.

LANCASTER, H. O.: *The mortality in Australia from cancer of the pancreas.* Med. J. Australia, April 17, 1954, 596-597.

In Australia at present the pancreas is the tenth most common site in males and the eighth most common site in females for fatal cancer. A review of the literature indicates that diabetes mellitus is much more frequently associated with pancreatic cancer than with cancer in other organs. In Marble's series of diabetics, cancer of the pancreas was the second most common cancer in both males and females, being second to gastric cancer in males and second to breast cancer in women. This is a very suggestive finding, although Marble regarded the association as probably fortuitous. The mortality rates in Australia for cancer of the pancreas have been rising over the years 1908 to 1945.

ALBOT, G., DUPUY, R., CHAMPEAU, M., CORTEVILLE, M. AND DRESSLER, H.: *Vesicular dysplasia. La Semaine des Hopitaux* T. 30 No. 16, 2nd March 1954.

In connection with 12 cases of vesicular dysplasia the writers consider a certain number of anomalies ranging from small glandular cavities in the wall of the gallbladder to signs of macroscopic tumors.

First of all they give a historical survey which reveals the confusion which was rife in this domain.

Indeed a different nature and etiology were ascribed to these anomalies according to the writers studying them: biliary glands by Malpighi found in dogs and later in humans by Ruysth Cattoni, Galleati, Vic d'Azir, Moreau; Luscha's glands, Rokitanski-Aschoff sinus, adenomyomas by Sutherland and Lubarsch, papillomas by Ringel and Irwin, cysts by Birchoff, cholecystites cystica by Podnar, cholecystites glandularis proliferans cystica by King and Mac Callum, Valves by Schmieden, Rhode, Berg, Cole, Rossiter etc. . . . all appeared as different pathological entities.

The writers believe all these signs to be merely variations of the same process. According to the different anomalies which they themselves have observed, they distinguish:

1. *Vegetations of the mucous membrane,* adenomatous proliferation of the mucous membrane associated or not with cystic cavities situated in the muscular layer or in the sub-serous layer.

2. *Adenofibromyomatous formations of the wall,* clusters of acini surrounded or not by fibrosis or myomatosis situated in the muscular or serous layer. They often lie on a level with the gall-bladder or with the neck of the gall-bladder and are sometimes responsible for a mechanical obstruction.

3. *Parietal cysts* which are cavities of a more or less irregular shape. Sometimes multilocular and chambered, when they are large they can upset the conformation of the region of the neck and of the gall-bladder itself. They are often localized in the latter regions; but at other times they are situated on a level with the vesicular body where their profusion may cause them to take on pseudo-tumoral forms.

4. *Dividing membranes and valves* sometimes have an obvious congenital origin; but in other cases (valvulated gall-bladders), the congenital origin cannot be affirmed since all the transitional stages between vegetations, valves and cysts may be observed. From the nosographical point of view the writers emphasize the similarity of these regions with certain pseudo-tumors of the endocrine glands such as adenofibromas of the mammary glands.

From the therapeutic point of view, they believe that operatory instructions should be carefully graded, but that if it is restricted to patients whose sharp and frequent pains are not relieved by sedative medical treatment, a surgical operation effects a noticeable improvement.

ALBOT, G., BUSSON, A., TOULET, J. AND CINQUALBRE, C.: *Front and side view cholecystography with accelerated and timed evacuation. (F. P. A. cholecystography). Albot-Busson-Toulet Method. La Semaine des Hopitaux* T. 30 No. 16, 2nd March 1954.

F. P. A. cholecystography represents a very exact radiological method of exploring the functioning of the gall-bladder whilst enabling its main features to be studied singly.

The examination is carried out in dorsal decubitus and front and side view exposures are made at each juncture by changing the position of the bulb but without moving the patient: after preparation, 5 minutes after Boyden's meal preceded by the ingestion of a 100cc iced solution of sodium chloride at 7%, 15 and 30 mins. after.

The semiological interpretation of the exposures enables at this point the exact morphology of the gall-bladder and the infundibulo-cystic region to be appreciated, the initial tonus of the gall-bladder (in proportion to the vesicular-vertebral angle seen in side view at the start) to be measured, the effort of contraction to be calculated by measurement of the angle of vesicular erection in side view and a chronometrical graph to be established from it, exact calculation of volume (by J. Toulet's method) to be made and an exact chrono-volumetric curve to be plotted, and an appreciation of the variation in the impregnation of the choledoch which all depend on the functioning of the gall-bladder.

Comparison of these different elements facilitates very precise radiological diagnosis.

Contraction and evacuation graphs running parallel and of normal intensity for non-pathological gall-bladders, may be in disagreement in cases of cystic obstruction (exaggerated contraction, insufficient evacuation).

There is the same appearance with hyposystolia, but the violent effort of contraction is generally temporary, only discernible on exposures made between the 5th and 15th minute and disappearing later. The two curves may remain parallel and in proportion to one another whilst both being insufficient (in hypotension) or on the contrary both exaggerated (in irritation of the gall-bladder).

Finally, certain atonies of the sphincter are accompanied by feeble contractions, paradoxically associated with hyper-evacuation.

By this method the main biliary duct is normally impregnated between 5 and 15 minutes after Boyden's meal. Shown up very clearly at the 5th minute in cases of irritation of the gall-bladder, the choledoch is on the contrary invisible during the whole examination in cases of cystic obstruction. Its impregnation may be slight, retarded (from the 15th minute only) and prolonged (still clear at the 30th minute) in vesicular hypotension and slight cystic obstruction.

F. P. A. cholecystography at present appears to be the most exact method for pre-operatory diagnosis in most patients and should limit still further the use of biliary radiomanometry for diagnosis leaving it however its indispensable role in pre- and post-operatory control.

ALBOT, G., TOULET, J. AND TREHEUX, H.: *The radiological syndrome of hyperevacuation of the gall-bladder. La Semaine des Hopitaux* T. 30 No. 16, 2nd March 1954.

Front and side-view cholecystographies and the exact calculation of the coefficient of the volume of vesicular evacuation have enabled the writers to observe in numerous cases a radiological syndrome of vesicular hyper-evacuation. Contrary to the opinion universally held until now, it is a question not of normal gall-bladders "very well emptied," but of pathological gall-bladders "emptied too much."

The most typical syndrome consists of an initial normal tension or hypertension, marked hyperkinesia, hyperevacuation and the early appearance of the biliary ducts. It is therefore contrary to the present well-

known syndromes of atony, vesicular hypotension, obstruction of the gall-bladder with hypertonic vesicular stasis, mechanical asystolia by distention of the gall-bladder behind a cystic obstruction.

These pathological disturbances in the functioning of the gall-bladder, of the hyperevacuation type, may be purely functional and of extremely common occurrence during affections far removed from the digestive tract (duodenal ulcer, duodenitis, spasmodic colitis) and their interest is then mainly documentary.

This functional cholecystographic syndrome occurs in certain conditions of true migraine where it is of indisputable therapeutic interest.

Finally, during certain diffuse organic disorders of the gall-bladder which are dysplasic or inflammatory in nature, the same syndrome may be observed, this time organic or organo-functional, revealing diffuse irritation of the gall-bladder; it may later turn out to be just the opposite syndrome already described by the writers under the name of early inflammatory asystolia of the gall-bladder.

The study of irritable gall-bladders, the comparison of the results obtained by accelerated front and side view cholecystography and by timed duodenal tubing pose physiopathological problems which are sometimes difficult to solve but for which complementary explorations, in particular cholecystographic tubing, enable satisfactory explanations to be given although these are very different from formerly accepted notions. The writers believe the duodenal spasms sometimes play a part in anomalies of bile flow during timed tubing, they indicate that hyperconcentration of the bile B may result from hyperactivity of the mucous membrane of the gall-bladder parallel to a motor hyperactivity of its wall in the case of a hyperevacuated gall-bladder.

OLMER, J., GASCARD, E. AND CASANOVA, P.: *Hepatic cirrhosis of peritoneal origin.* Presse Médicale T. 62 No. 29, 21st April, 1954, p. 600-602.

The authors call attention to the part of certain chronic peritonitis of undetermined oetiology in the originating of cirrhoses of the liver. Such an oetiology has been long ago described as falling in the group of cirrhoses due to tuberculous peritonitis. But in many cases the tuberculous nature of the peritoneal infection has been unquestionably excluded. It is related to a process developing in the liver, equivalent to that described by Chabrol as present in the spleen and achieving Banti's syndrome of peritoneal origin.

A case is reported in detail which is typical of that cirrhosis of the liver originating from the peritoneum. The disease broke out with massive hematemesis followed by rapid development of an ascito-oedematous syndrome. Examination showed an enlarged liver, voluminous esophageal varices and there was unquestionably absence of initial splenomegalia (operative findings). The evolution which from the onset seemed to proceed from a very severe form of portal hypertension syndrome has been controlled by a porta-caval anastomosis.

At operation was seen a "gangue" of peri-hepatitis suggesting Carchman's "iced liver." No specific change was histologically demonstrated, but only a fresh evolutive cirrhosis with annular development tendency.

The performance of the porta-caval anastomosis has been very successful in spite of the post-operative appearance of an enlarged spleen.

Thus should a peritoneal oetiology be suspected in those cases of hepatic cirrhosis the origin of which remains unrecognizable.

Guy Albot.

LEGER, L., LAJOUANINE, P., CORNET, A. AND ARNAVIELHE, J.: *Rebound of pancreatic diseases on the spleen.* La Presse Médicale, 1954, 62. No. 31.

The close connection of the splenic vein with the body of the pancreas accounts for the rebound of this gland's diseases on its satellite vessel and the spleen. With the use of splenoportography it is possible to show this morphologic repercussion and to explain a certain number of functional changes (splenomegalia, hemorrhages) which have hitherto called little attention.

The authors present a first series of cases concerning those carcinomas of the pancreas with posterior extension causing a compression or a thrombosis of the splenic vein and at times wrongly suggestive of the possibility for the splenomegalia to be primary.

In a second series of cases the portal hypertension located in the spleno-mesenteric system is caused by a pressure on the splenic vein from a lesion of the pancreas body which can induce a digestive hemorrhage.

Such facts were not ignored but they were inadequately explained. Now with splenoportography it is made possible to afford the desired pathogenetic explanation.

This method of exploration seems greatly informative in the cases of digestive hemorrhages and should be routinely performed.

In addition there are some clinical pictures of Banti's syndrome type for which an initial explanation might be found in a pancreatic lesion.

Splenoportography allows a better estimation of the "operability" of pancreatic tumors, that is to say whether one should give up any idea of surgical exeresis or, on the contrary, extend the exeresis as far as the vena porta which sacrifice is now recognized to be possible.

Guy Albot.

LEGER, L. AND LATASTE, J.: *Does the sphincter of Wirsung's canal play a part in the pathology of the pancreas? Anatomical and radiological data.* La Presse Médicale, 1954, 62, No. 14.

The tendency of giving a larger place to Wirsung's canal in pancreatic pathology, the supposed rôle of this canal in the bilio-pancreatic reflux, the possible presence of a syndrome from dystonia of the pancreatic sphincter, have prompted the authors to resume an anatomo-radiologic study of this sphincter, as classical text-books give little information in regard to its situation and even to its real presence.

From this anatomo-radiologic study it appears that the true pancreatic sphincter, as physiologically considered, is constituted by the upper portion of Oddi's sphincter. Those muscular fibres, situated around Wirsung's canal just before its junction with the choledochus, are inconstant and incompletely circular, so

they do not seem able to play an efficient sphincteral rôle. The importance of the reflux into Wirsung's canal as visualized during cholangiography appears to be less relevant to the tonicity of the pancreatic sphincter than to the balance between the pressure in the Wirsung's canal and the choledochus on one hand and the miscibility of the contrast fluid and pancreatic juice on the other hand.

The sphincter of Wirsung's canal, being considered its minor significance, appears to play only a limited and possibly inconstant rôle in the pathology of the pancreatic gland.

Guy Albot.

LEVRAT, M., GIRAUD, M. AND BRET, P.: *Radiological exploration of the pancreas by transverse axial stratigraphy.* Arch. Mal. App. Digest. 43, 2, 177-185. Febr. 1954.

The transverse axial Stratigraphy has been invented by Professor Vallebona of Genoa. The principle on which the transverse avial stratigraphy is based is the rotation, synchronous and the same direction of both subject and film while the X-ray tube remains fixed. The patient sits on a stool and the film is placed horizontally on a disk. The normal oblique ray at 22° from the horizontal centered on the axis of rotation of the film passes through the axis of rotation of the subject. Due to the skimming incidence of the X-ray and the rotation at 360° of both subject and film there is a favourable horizontal plane which will be perfectly reproduced on the film while the planes above and below will be erased.

For exploration of the pancreas a double gaseous contrast, created by gastric insufflation on one side and a retropneumoperitoneum on the other, is necessary.

The normal pancreas appears transversly elongated between the opacity of the liver, from which it is usually separated by the gaseous clearness of the duodenum, on the right, and the splenic opacity on the left. In front it is limited by the gaseous clearness of the stomach and behind by the gaseous clearness of the retropneumoperitoneum which separates it from the kidneys, the aorta, the vena cava and the vertebral column. As the pancreas is slanted upwards and to the left at least two X-rays at different levels, a lower one for the head and a higher for the body and tail are necessary to obtain picture of the whole gland.

We are able to report X-ray photographs of normal pancreas and four pathological observations, two cancers, one pseudo cyst and calcifications of pancreas.

At the moment however the method can only give a volumetric appreciation of the body and tail together and morphological details must not be demanded of it. It would need a much longer experience than is yet ours to perfect the technique and learn to read the negatives.

Guy Albot.

DENT, J. Y.: *Discussion on the management of the alcoholic in general practice.* Proc. Roy. Soc. Med., 47, 5, May 1954, 331.

Dent uses apomorphine, allegedly with excellent results in treating alcoholism. He thought at first that the vomiting caused by the drug produced a conditioned aversion to alcohol, but has now given up this idea, and thinks that apomorphine causes some salutary change in blood chemistry. Sometimes he uses apomorphine by the mouth, employing Parke Davis' one-tenth grain tablets, in increasing dosage, at hourly intervals till vomiting occurs. Perhaps better results are obtained by I-M. injection. He has used apomorphine with equally good results in mania, in morning sickness and in morphine addiction. He is very enthusiastic about his results. He admits also the value of vitamin B complex and B_{12}, and believes that psychotherapy is of some value.

ROBERTS, P. A. L.: *A danger of peptic ulceration: a survey of 8 cases complicating surgery and trauma.* Brit. Med. J., June 5, 1954, 1295.

Roberts points out that peptic ulcer may originate after or, if previously present, may be greatly aggravated by any kind of surgery or trauma. Shock appears to be the element conducive to such aggravation. He describes 8 such cases, 5 of whom died. Perforation or hemorrhage is the usual immediate cause of death. Consequently he feels that the possibility of ulcer should be kept in mind, following all operations, and means of immediate effective treatment should be at hand.

PETTET, J. D., BAGGENSTOSS, A. H., JUDD, E. S., JR. AND DEARING, W. H.: *Generalized postoperative pseudomembranous enterocolitis.* Proc. Staff Meet. Mayo Clinic, June 16, 1954.

Postoperative pseudomembranous enterocolitis, a serious and frequently fatal sequela of intestinal operations, particularly for colonic cancer, and characterized by acute abdominal symptoms with pain and bloating and prostration, and pathologically by the formation of a membrane upon the mucosa of the gut, formed of fibrin, cellular debris and mucus along with colonies of pathogenic bacteria, is not, as has been supposed, a new disease resulting from the use of chemotherapy and antibiotics but rather a very old disease whose incidence has not greatly increased in recent years. Probably the formation of a pseudomembrane can be brought about by a wide variety of toxic and infectious agents, particularly when there is a change in bacterial flora from a benign to a pathogenic type. The condition should always be suspected when, after operation, there is sudden abdominal distention with pain, vomiting and shock.

CASTIGLIANO, S. G. AND ROMINGER, C. J.: *Distant metastasis from carcinoma of the oral cavity.* Am. J. Roentgen., Rad. Ther. and Nuc. Med., 71, 6, June 1954, 997-1006.

While distant mestastases in various parts of the body from oral cancer occur in about 2 to 5 percent of cases, the incidence of spread is on the increase, so that, prior to local operation for mouth cancer, the lungs and bones should be x-rayed. When the primary lesion is completely removed with regional lymph nodes, the disease usually is cured. This unfortunately is not true in cancer of the breast in which, in spite of radical surgery, late, distant metastases are likely to appear.

$60-MILLION YEARLY RESEARCH BY PHARMACEUTICAL INDUSTRY MAY LEAD TO CONTROL OR CURE OF MOST MALICIOUS DISEASES

America's pharmaceutical industry is spending approximately $60,000,000 a year for research, John A. MacCartney of Parke, Davis & Company, said recently.

"New research laboratories have been built, or are planned, by practically every major pharmaceutical manufacturer," he told the American Pharmaceutical Association at its 101st annual convention.

"The reason is two-fold: First, the passing years amply demonstrate the fundamental soundness of a heavily-financed and adequately-staffed research installation. Second, research tends to be a self-perpetuation effort. Each new discovery opens new avenues of problem approach and new vistas of jobs to be done."

The Parke-Davis trade relations manager, who also is retiring first vice president of the A.Ph.A., said, "The very achievements so far made by research in the control and elimination of infectious diseases have only served to accentuate the problems of degenerative diseases and those pathologic conditions which primarily affect the older age group.

"It is not too much to hope that with adequate research investment—and in spite of the four-to-one gamble it represents—we will, in the immediate years ahead, see definite control or cure for some of mankind's most malicious diseases.

"Poliomyelitis appears to be high on the list of those diseases which will soon be controlled. The problem of the common cold and cancer will be solved. Heart diseases will no longer eliminate the high percentage of our mature population which it does today," he said.

MacCartney pointed out to the delegates that tuberculosis, once the number one killer, already had yielded to research developments.

"Leprosy, typhus, malaria and other world scourges are being rapidly controlled and may one day be merely textbook curiosities," he added.

The Parke-Davis official brought out that the pharmaceutical industry through research had gained "a new and better recognized status as professional people and an important element in the progress of medicine."

"In fact," MacCartney added, "the 'gifts' of pharmacy have greatly improved the present-day practice of medicine. Most of these 'gifts' have emanated from the great research laboratories which this industry has privately financed and privately supported."

EXPASMUS (MARTIN H. SMITH)

Description: Expasmus is a new combination of antispasmodics, plus a powerful analgesic, in a single prescription form. Each tablet contains dibenzyl succinate 125 mg., mephenesin 250 mg., and salicylamide 100 mg.

Action and Indications: Expasmus relaxes both skeletal muscle and associated smooth muscle spasm, relieves low back and arthritic pains, and acts as a mild nonbarbituate sedative and relaxant in tension. Dibenzyl succinate, useful in reducing muscle spasm, can safely be given in large doses. Mephenesin is included as a nonhabit forming relaxant of skeletal muscle and mental tension. It is completely metabolized in the liver and does not accumulate in toxic quantities. Salicylamide, more powerful than aspirin, provides swifter relief of pain than spasmolytic drugs alone.

Dosage: Average dose, two tablets every four hours. Maximum daily dose, twelve tablets.

Available: 100 tablets to a bottle, with MHS impressed on each tablet.

Price to Druggists: $33. per doz. bottles.

Source: Martin H. Smith Co., New York 13, N. Y.

NEW COMBINATION ANTIBIOTIC-HORMONE PRODUCT FOR EYE TREATMENT ANNOUNCED BY PARKE-DAVIS

Detroit.—Parke, Davis & Company has announced a valuable new combination antibiotic and hormone preparation for physicians' use in treating patients with eye infections.

The new product, called Chloromycetin-Hydrocortisone Ophthalmic, is for topical use in ocular infections. The hydrocortisone acetate acts to suppress fibroblastic proliferation of tissue.

"Use of Chloromycetin-Hydrocortisone Ophthalmic appears a step toward ideal local therapy of ocular diseases susceptible to these agents," the company said. In some ocular infections when scarring is not anticipated, the value of Chloromycetin in eradicating bacteria is paramount, hydrocortisone controlling inflammatory response and making the patient more comfortable.

"When the patient's vision is threatened by involvement of the anterior segment, hydrocortisone can block inflammation immediately, suppress fibroblastic proliferation and lessen pain and photophobia, Chloromycetin being of prophylactic use in this case."

In other cases, the company pointed out, "the two drugs may be needed to exert equal effect as in traumatic lesions of the eye, postoperative treatment of glaucoma and in chemical or thermal ocular burns."

Parke-Davis said the suggested dosage schedule for Chloromycetin-Hydrocortisone Ophthalmic, available on prescription, is: First 24 to 48 hours—2 drops to the affected eye every one to three hours, night and day. After 24 to 48 hours—2 drops every three to four hours during the day, night instillations being omitted if desired. Continue until the eye has appeared normal for 48 hours.

The new product is supplied in dry form, each 5-cc. vial containing 12.5 mg. Chloromycetin, 25 mg. hydrocortisone acetate, and borate buffer equivalent to 100 mg. boric acid, with Phemerol chloride (benethonium chloride, Parke-Davis) present so the suspension after preparation will contain 1:10,000 as preservative in individual packages with separate dropper cap.

Parke-Davis said the dry material is stable at room temperature for two years, while the prepared suspension may be kept at room temperature for 10 days without loss of potency.

Chloromycetin-Hydrocortisone Ophthalmic is prepared for use by adding five cc. sterile distilled water to contents of the vial under aseptic conditions and shaking to make a uniform suspension.