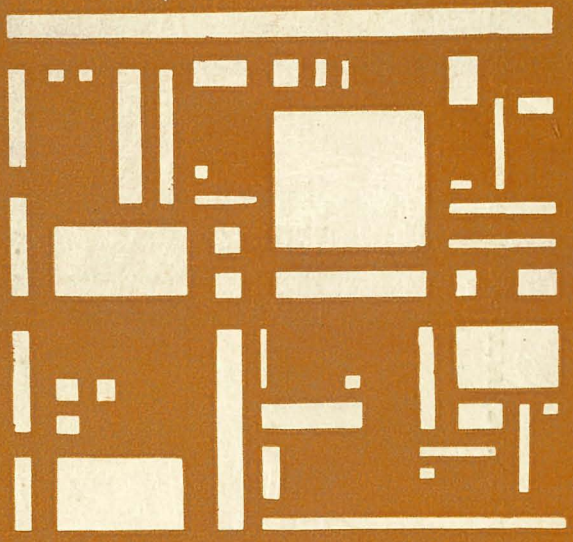
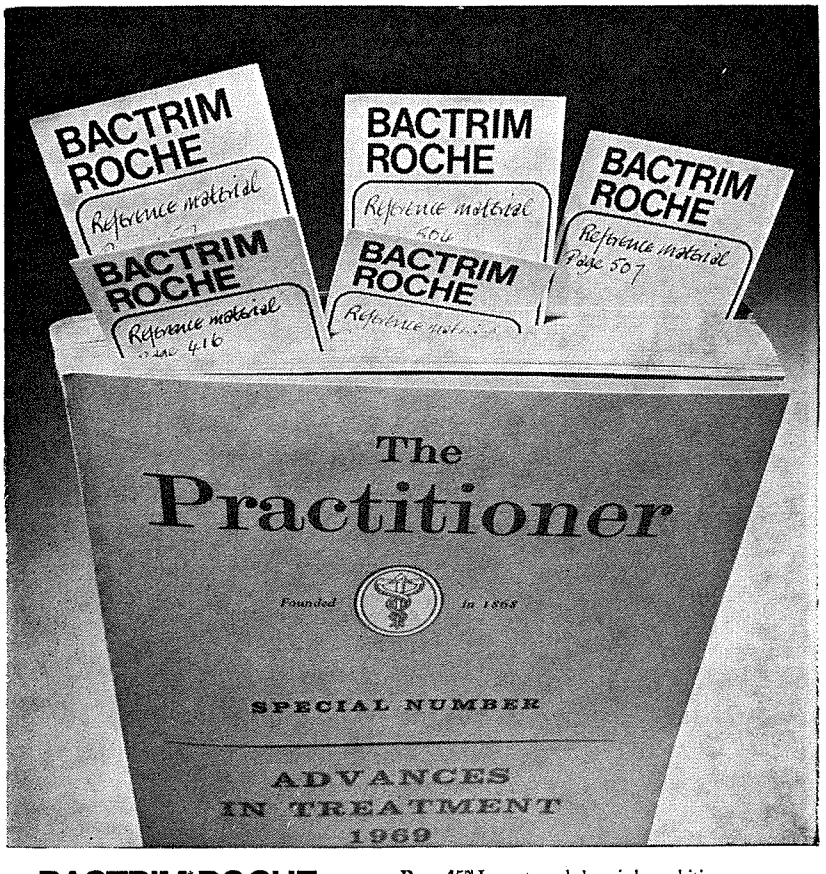
CHESTPIECE

APRIL 1970

No 24





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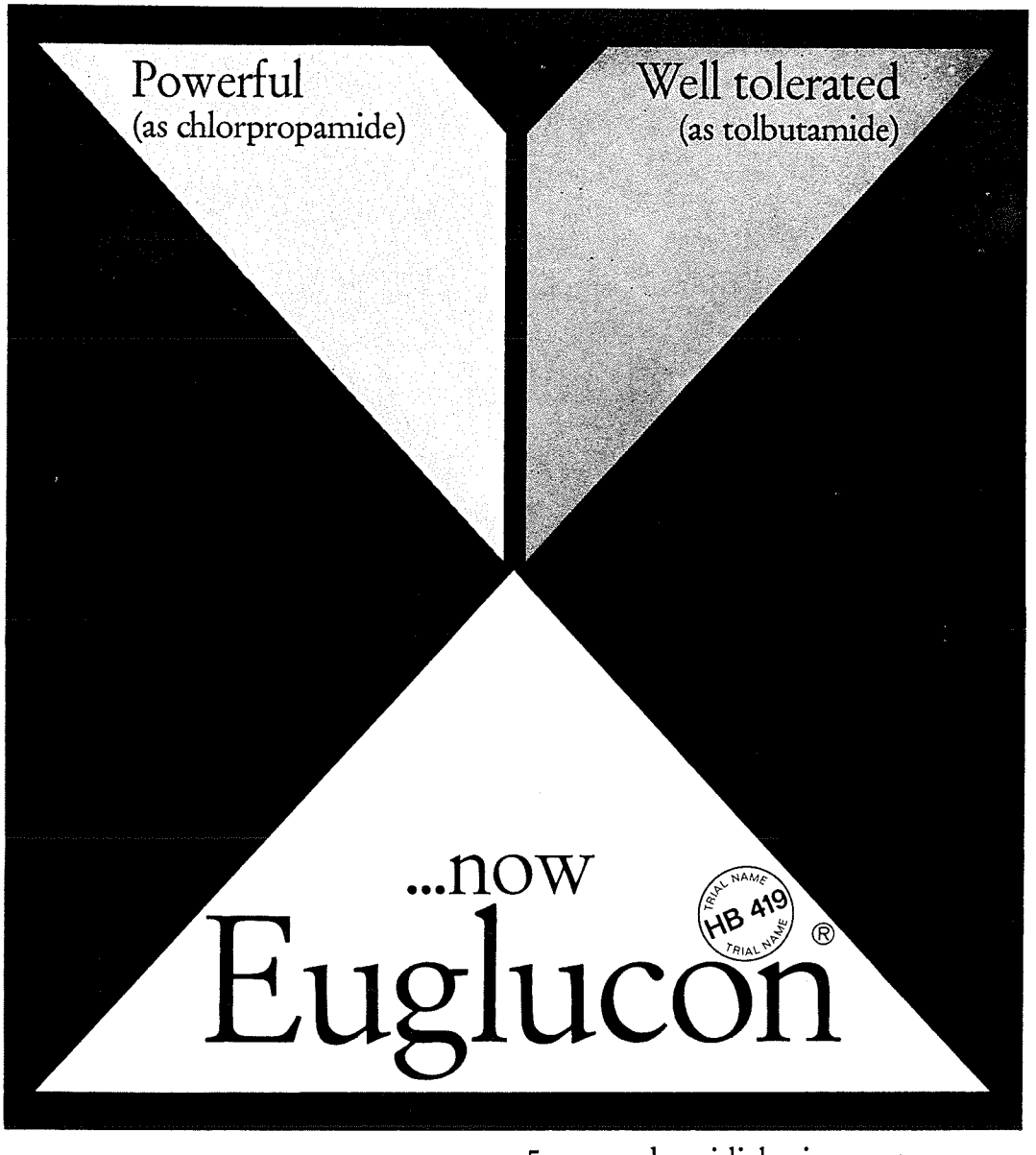

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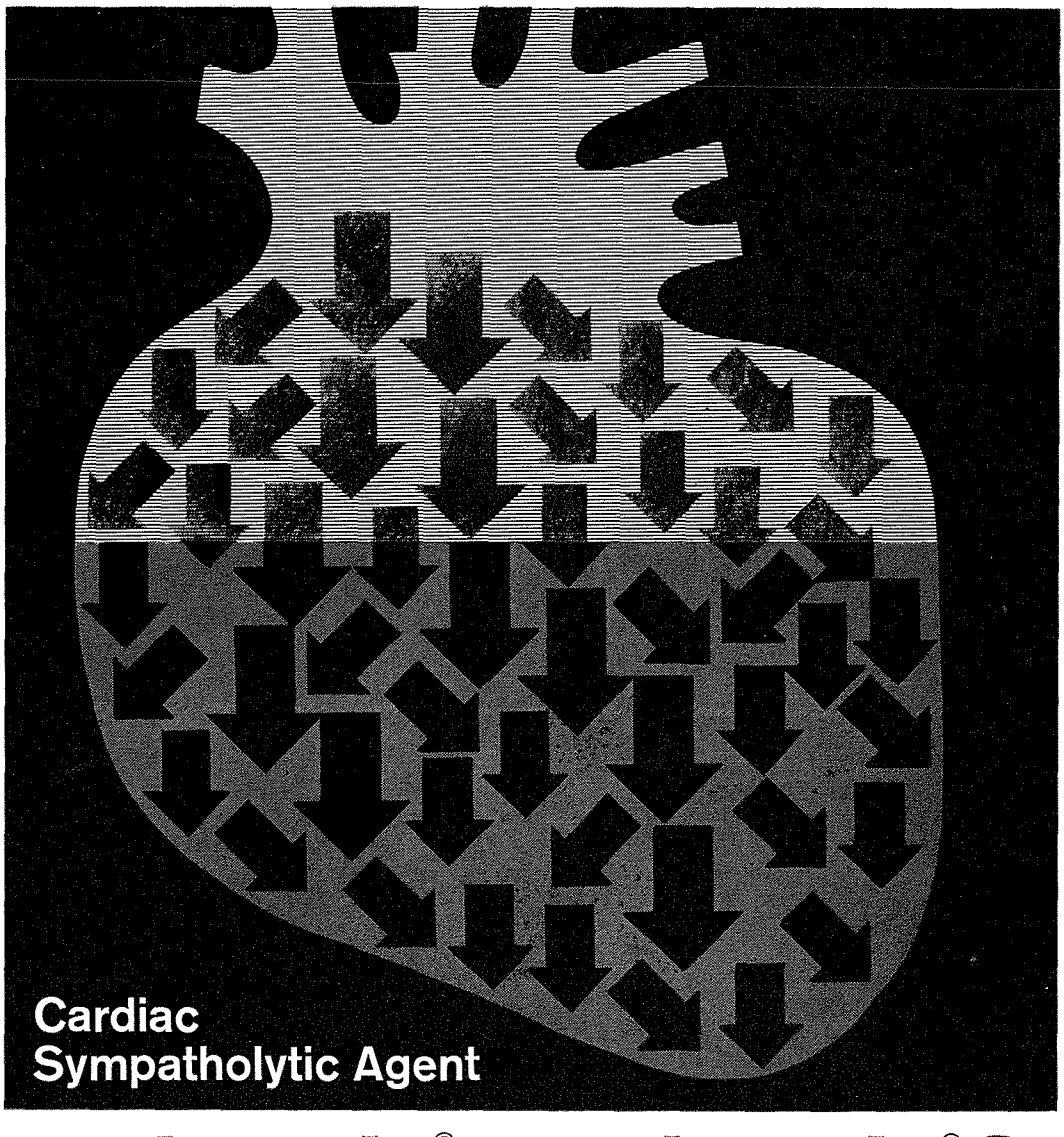

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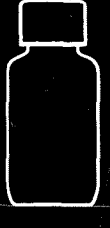

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chestpiece 23

april 70

journal of the malta medical students association

contents

The medical student is accepted as part of the medical profession as soon as he enters the hospital wards. This he always feels a significant step in his academic life and it is interesting to observe his reactions to his new status. Immediately he senses the competitive spirit that prevails around him and helplessly becomes part of the rat-race. He is spurred on to dedicate much time to book work — often excessively, without too much concern for his practical work. Since most examinations and tests are primarily non-practical, the rewards for his ward work are often minimal, apart from a great deal of personal satisfaction. Above all the emphasis in most of his learning is largely on theory with little reference to the practical aspect of medical science.

This journal feels that the importance of practical work is not as yet firmly inculcated into the mind of the medical student starting his clinical years. Students, on the other hand, are often foolishly reluctant to centre their lives around the hospital. There should be far more opportunities for the student to attend meetings of a clinical nature, which should replace, as much as is possible, formal lecturing. The introduction of clinicopathological conferences and surgical meetings was a step in the right direction, unfortunately not fully appreciated by students and other members of the medical staff. The shifting of hospital visiting hours will enhance the value of afternoon bedside sessions.

The observance of good manners requires that we formally congratulate Profs. V. G. Griffiths on his appointment as Professor of Surgery and Senior Surgeon to the Government, and Dr. J. Leslie Pace on his appointment as Professor of Anatomy. That we wholeheartedly do on this opportunity provided by the first issue of Chestpiece since the event. However we would also like to harp on other perhaps more sincere sentiments provoked by these happenings, namely a mingled sense of loss and hope.

Preclinical students are understandably grieved at the loss from the department of a man who became a legend in his own time and who inspired the saying among students still echoing in the corridors at Tal-Qroqq that "a lecture with Griffiths a day teaches you anatomy the right way". Profs. Griffiths succeeded the late Profs. J. Briffa to the chair of anatomy in 1954. At the time the amenities available consisted of a dubious "dissecting room" at the Argotti Gardens, and equipment which Profs. Griffiths claimed "beggared description". Under his guidance the department moved to the Evans labs, better equipment was installed, a full time lecturer was appointed and the demonstrator staff improved. But even this compares very unfavourably with the culminating acheivement towards the end of his tenure represented by the setting up of a tip top department at the new site, complete with the necessary equipment. We have seen former students of anatomy turn green with envy at the sight of the facilities now available and which they lacked in their days. They never fail to point this out to us.

It would be unfair on our part to linger on the administrative capabilities of Profs. Griffiths without passing on to his attributes as a teacher. The most delightful thing about it all was the way he rendered the task of remembering the dry facts of anatomy easy by continuously integrating structure and function, and making use of blackboard diagrams. His peculiar manner in constructing the diagrams, plastering on muscle after muscle on a silhouette of underlying bone structure was a ritual which always captivated the student immagination. At the same time he brought home the point that anatomy should be learnt in the dissecting room and not at lectures, which were intended more as a resume than anything else. "This is your anatomy textbook" he would say, pointing at the cadaver. Whilst firmly believing that the primary aim of the department of anatomy was to teach anatomical facts to students to enable them to become good doctors, and that therfore such things as unrealistic research which would alienate the Professor from the student should be shunned, yet he always found time to include in his lectures topics on the history of anatomy. Culture was not to be neglected. For this outlook alone, in a department where the greatest danger is death through boredom, students should be thankful.

Students now look up with hope at Profs. Pace to keep up the good work, and are eager to witness the changes which a new personality unconsciously imposes on the system. Profs. Pace's dedication as an academician is unquestioned, especially in his preferred field of Histology. We wish him good luck in his research work on the colon. Profs. Pace is young and hence receptive to the modern trends in the teaching of preclinical studies. He has already made plain the relevance of electron microscopy to the study of modern medicine.

A time of change is always a critical time. We take the liberty to suggest that at the moment what is urgently needed is:—

a. The emergency appointment of an experienced lecturer to see the present course through the hectic month ahead, and to fill the vacum created at the lower rungs of the organisation by the recent upgrading.

b. A rapid reappraisal of the scope of anatomy to strike a stable balance between teaching anatomy for its own sake i.e. greater detail and teaching anatomy as a prelude to medical studies i.e. more clinical applications and better living anatomy demonstrations.

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a case of hydatid cyst of the liver

PRESENTED AT A CLINICAL MEETING OF THE DEPARTMENT OF SURGERY, MEDICAL SCHOOL, MALTA.

8th Oct. 1969

Clinical History

Mr R. Attard (1) : "P.F. a 39 year old male labourer (case no: Cas. 15720/69) was admitted to M.S. II on the 8th September 1969 at 6.45 a.m. with a 10 hour history of moderate hypogastric pain and some nausea, but no vomiting. The pain came of suddenly and was not colicky but constant. He was obese, ill but not shocked, mildly dyspnoeic and slightly icteric. The abdomen was somewhat distended and fixed mass palpable in the epigastrium, not very tender. No lymphadenopathy.

The day after admission some pyrexia and sweating was recorded which later lasted a few days. (see temperature chart 1). Pulse was 142/min, respiratory rate 25/min. BP. 170/110.

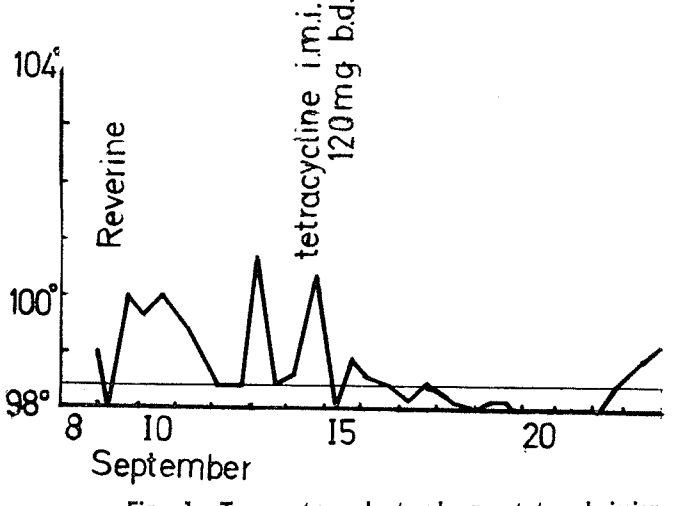

Fig. 1. Temperature chart subsequent to admission.

Treatment consisted of intravenous fluids; Reverin and Algaphan, and gastric aspiration. His condition subsequently improved and the intravenous therapy discontinued after six days. Nine days after admission the epigastric mass became mobile being also hard and irregular. No definite tenderness was elicited. Bowel sounds were infrequent.

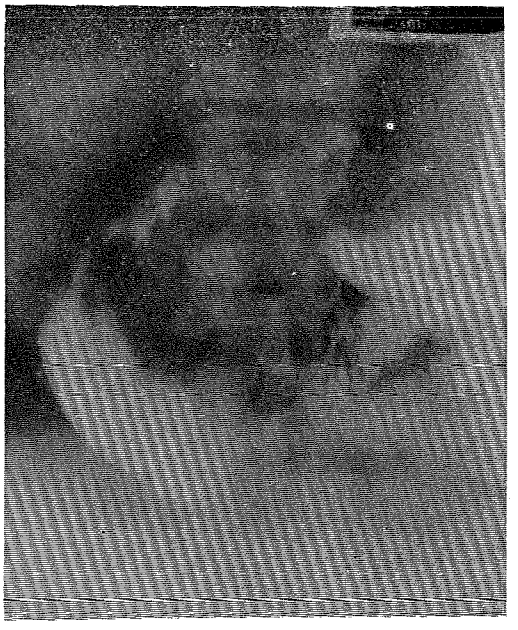

Fig. 2. Barium meal showing the splayed out duodenal loop.

INVESTIGATIONS:

Haemoglobin: 103% ESR: 10 mm/hour.
WBC: 18,000/cu.mm.,
serum amylase: 300 units/100 ml.
serum bilirubin: 2.1 mg/100 ml.
Van Den Bergh: indirect.
S.G.P.T.: 34 I.U./Litre.
Casoni test: *negative*
serum electrophoresis: *"reduction in albumin with a marked increase in alpha 1, and a slight increase in alpha 2, significant reduction in beta and absolute reduction in gamma-globulins."*
Barium meal: *"no ulceration or filling defects in stomach; lower portion of stomach and duodenum displaced outwards and the duodenal loop is splayed out, suggesting an enlarged head of the pancreas:- ?NG".*
Urinalysis: protein ++, occasional RBC, WBS., granular casts, bilirubin +, urobilinogen absent.
Faecal occult blood was positive in two of four specimens.

Discussion

The differential diagnosis seems to lie between (1) pancreatic cyst (2) hydatid cyst of the liver (3) choledochus syst.

(1) The barium meal appearance suggests a pancreatic cyst. The dramatic presentation may be explained by haemorrhage or infection occuring in a true cyst. The presenting picture was not typical of acute pancreatitis and the

mass was present "ab initio". These facts are against the diagnosis of pseudocyst. The mobility of the mass is a strong argument against pancreatic pathology.

(2) The diagnosis of choledochus cyst was unlikely in view of the situation and vertical mobility of the swelling. (A case of Choledochus cyst was recalled which was drained to the exterior with fatal results).

(3) The diagnosis of hydatid cyst would fit in with the clinical picture in spite of the negative Casoni test.

The impressive displacement of the lower stomach and splaying of the duodenal curve in the roentgenogram led to the general conclusion that the swelling was probably arising from the pancreas."

.....

At a subsequent meeting on 12th Nov. 1969.

Mr R. Attard : "I explored the patient's abdomen and found that he had a very large multiloculated hydatid cyst of the liver. I tried to aspirate the cyst and inject formalin solution, but could only obtain a few c.c.'s. So after probing around the mass, I opened the cyst and enucleated the daughter cysts mainly by scooping them out with a spoon. This left a thin cyst wall inferiorly, the rest of the cavity being made up of liver tissue. I took a biopsy of the capsule and then marsupialised the cavity packing it with gauze.
Histological diagnosis: *Taenia Granulosa cyst. No scoleces seen.*

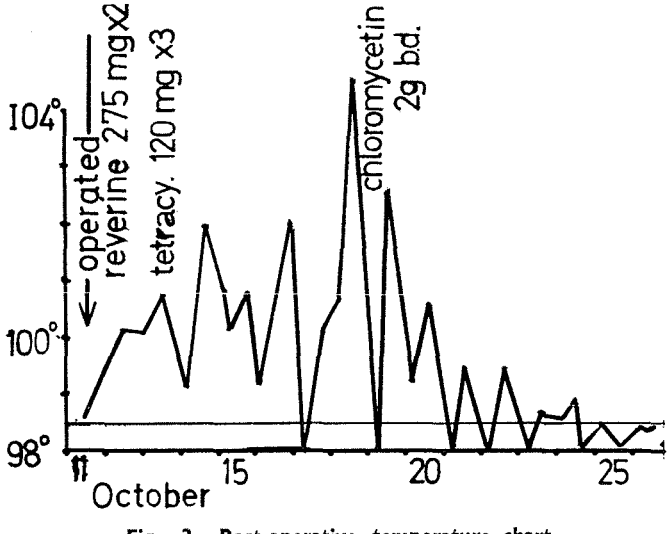

Fig. 3. Post-operative temperature chart.

Where did we go wrong in the diagnosis? We repeated the Casoni test and obtained a negative result.

After operation, the patient developed some pyrexia which respond to Chloromycetin 2g b.d. for thirteen days, when the temperature returned to normal. (see temperature chart 3). Then, after the pack was removed, a slight purulent discharge appeared through the track. On the 2nd November the patient started passing bile through the drainage wound to the order of 700-900ml every 24 hours. We put a tube into the fistulous track and collected the efflux into a bag. Six days later the discharge was only 200ml in 24 hours. This biliary fistula at first worried me since I feared it might be due to slough in the cavity wall separating and causing a communication with a bile duct radicle.

Incidentally, the cyst at operation was found to be somewhat pedunculated and encroached on the lesser sac pushing the stomach forwards and to the left, also splaying out the duodenum. This explained the radiological appearance."

Profs V.G. Griffiths (2) : "Mr Muscat had a case of hydatid cyst in a rib. Recently I had a case of hydatid cyst in the rectus muscle (reported in St. Luke's Hospital Gazette). I have had a few hepatic hydatid cysts, one was the case of the "disappearing cyst", since the mass varied in size from time to time. We later found that this not uncommonly happens in the liver, due to the cyst emptying into a bile duct periodically. I excised the cyst with a remnant of the right lobe of the liver. Two or three years ago, Mr Amato had a remarkable hydatid cyst of bone."

Mr Attard : "How should one deal with a biliary fistula when this occurs post-operatively?"

Profs Griffiths : "It should dry up spontaneously — one should treat expectantly, initially.

Greece has a high incidence of hydatid cysts. So have Argentina, Australia, New Zealand and Wales."

ACKNOWLEDGEMENT

We wish to thank Professor Griffiths and Mr Attard for permission to publish this case.

a case of carcinoma of the pancreas

PRESENTED AT A CLINICOPATHOLOGICAL CONFERENCE, THE MEDICAL SCHOOL, MALTA

27th Nov. 1969

Clinical History

Mr R. Attard (1): "L.L. a 67 year old male (Case No. Cas 17819/69) admitted to MSII on 15th November 1969, gave a six week history of severe pain in the upper lumbar spine, radiating around the waist and down to the hypogastrium from both sides. Since three weeks he developed dark urine and light coloured faeces. Anorexia and weakness accompanied the above. Two days before admission he complained of dyspnea, without cough or expectoration. He used to smoke 10 cigarettes a day, and was operated far bilateral inguinal herniae some years ago.

He was obviously ill and in pain, with a faint icteric tinge of the conjunctivae. His tongue was furred and dehydrated, and he showed a tachycardia of 134/min. and hypertension 220/70. Temperature was 99°F. Respiratory rate 20/min.

A general examination revealed a bilateral pleural effusion, and a palpable liver five fingers below the right costal margin. No lymph nodes were palpable."

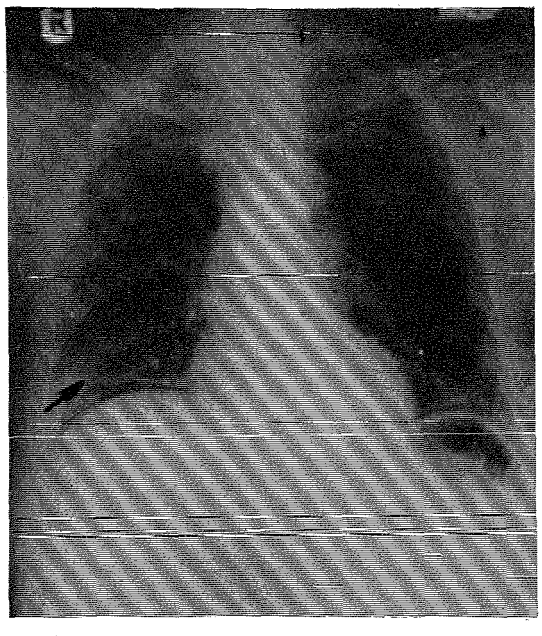

Fig. 1. Linear atelectasis (arrow) in right base.

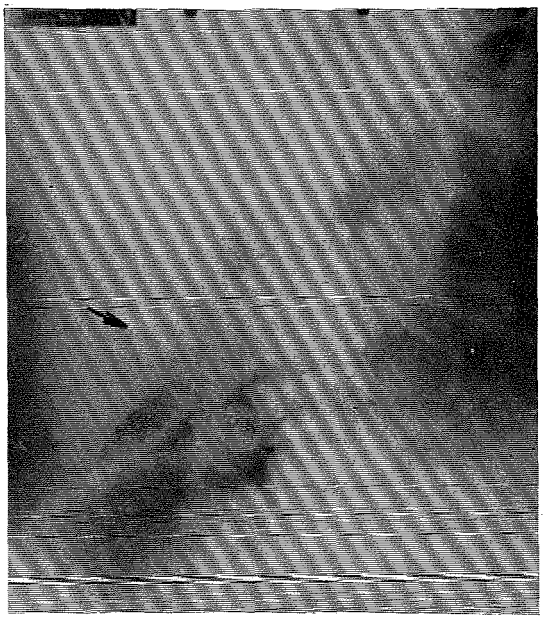

Fig. 2. Enlarged liver. There is also an opacity in the right hypochondrium (arrow), probably gall stone.

INVESTIGATIONS:

Haemoglobin : 100%, W.B.C. : 10,500/c.mm.,
Blood urea : 55mg/100ml.
Serum bilirubin : 5.3mg/100ml which rose five days later to 16.3mg/100ml.
Serum alkaline phosphatase : 21 K-A units/100ml which rose to 62 K-A units/100ml.
S.G.P.T. : 20 I.U./Litre rising to 62 I.U./Litre.
The Prothrombin time was 15 sec (control 15 sec.).
Prothrombin index : 100%.
Urinalysis showed uribilinogen & urobilin ++, bilirubin absent.
Serum proteins : 5.6g/100ml.

Serum electrophoresis *"There is a marked reduction in albumin with a very considerable increase in alpha 1- and a considerable reduction in alpha 2- with a slight relative increase in beta-, and a marked absolute reduction in gamma- globulins. The pattern is primarily suggestive of acute hepatitis".*

Radiological studies: *"CHEST : Linear atelectasis present in the right base. No other abnormality seen"*

"ABDOMEN : Enlarged liver. There is also an opacity in the right hypochondrium — probably gall stone. Renal stone cannot be excluded."

Clinical Course

The patient was put on parentrovite and vitamin K and on a fat free diet. Seven days after admission, he was given 100mg. tetracyline i.m.i., b.d., three days later he suddenly deteriorated, being now deeply jaundiced (given steroids, Kanamycin and i.v. therapy); he finally died that day, on the 25th November '69."

Post-mortem Findings

Profs G.P. Xuereb (3) : "The provisional clinical diagnosis was carcinoma of the pancreas, but there were two distinguishing features, namely:-

(1) the short history of six weeks, and
(2) the interpretation of the serum electrophoresis — eg changes in the biochemical values in a matter of five days.

Postmortem examination (no 107/69) on 25th Nov '69 showed the following:

1. Pulmonary oedema, right-sided cardiac failure.
2. Carcinoma, head of pancreas.
3. Diffuse metastases in liver and lymph nodes. There was no involvement of the duodenal mucosa.
4. Cholelithiasis. The gall bladder was dilated and filled with bile and a large calculus. The common bile duct was not dilated.

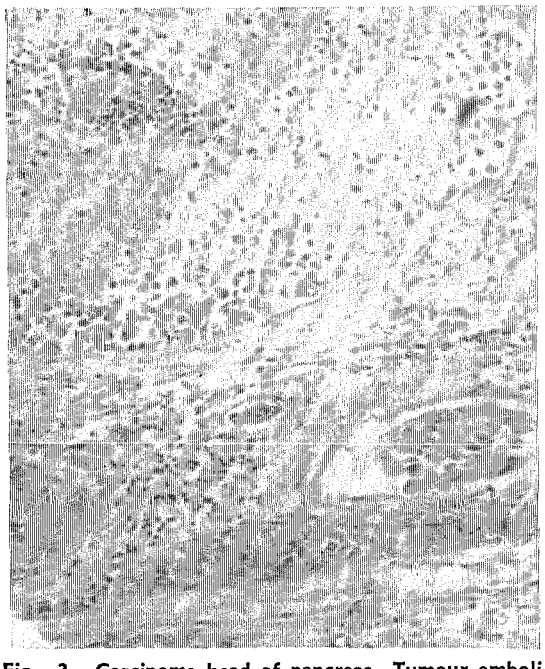

Fig. 3. Carcinoma head of pancreas. Tumour emboli in regional vessels.

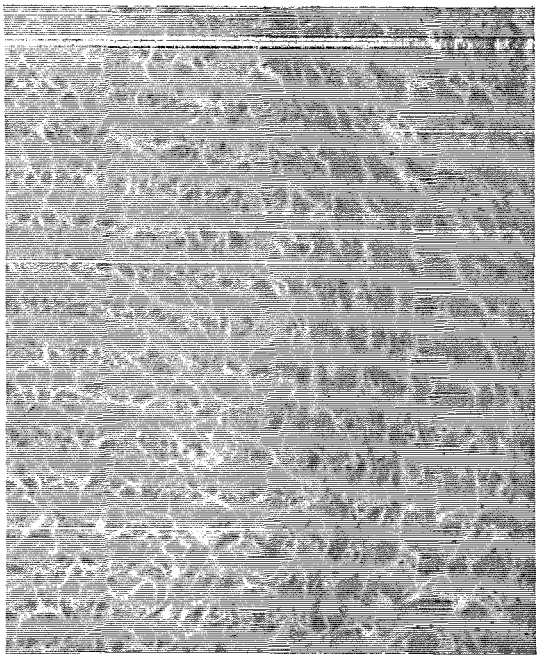

Fig. 4. Metastatic deposit in liver (right: liver tissue), carcinoma simplex.

5. There was a solitary metastatic deposit in the spleen.
6. The lungs looked normal, but five metastatic nodules could just be palpated and were confirmed histologically.

Histological findings:

Carcinoma, head of pancreas; tumour emboli are seen in the regional lymph and blood vessels. The features were that of an adenocarcinoma. There was some attempt at acinar formation. The liver metastases showed carcinoma simplex. The metastatic deposit in the spleen showed adenocarcinoma. A metastatic clump, apparently in the alveoli showed mucous carcinoma differentiation. The lymph nodes were replaced by undifferentiated carcinoma. These appearences bear out the interesting fact that metastatic deposits may take on anaplastic changes according to the site where they are found."

Discussion

Profs V.G. Griffiths (2) : "This case presented with pain, before the appearance of jaundice — this is unusual. The common tale that jaundice due to carcinoma of pancreas is painless is a "fairy tale". The pain of carcinoma pancreas is not colicky, nor episodic; but fixed and constant. The common saying that "jaun-

dice" with pain is due to stones, jaundice without pain is due to carcinoma pancreas", is only a general guiding statement — but, as this case shows, it does not always hold true."

Dr. F. Zammit (4) : "Were there any skeletal metastases?"

Profs G.P. Xuereb : "These were not looked for."

Mr R. Parnis (5) : "This disease is commoner in diabetes, although this patient was not diabetic. I wonder if carcinoma of the pancreas is commer in Malta than elsewhere in view of the high incidence of diabetes here. Secondly it is said that jaundice associated with a distended gall-bladder is a feature of carcinoma of the pancreas; however, a gall-bladder containing stones, as in this case, is not likely to distend."

Profs V. G. Griffiths : "Courvoisier's Law would not be applicable in this case."

Mr J. Muscat (6) : "In cases of carcinoma of the head of the pancreas, enlargement of the liver is due to hydrohepatosis, but in this case it was due to metastases. The rapid spread occuring in this case, with vessels full of tumour emboli, is unusual in this type of tumour. The earliest sign of this neoplasm is pain in the back, which is difficult to distinguish from the pain of osteoarthritis of the spine: I remember a woman with O.A. spine and backache, who was found to have a carcinoma of the body of the pancreas on laparotomy. The head of the pancreas is a favourable site for this cancer because it produces jaundice which leads to an earlier diagnosis than in the case of cacinoma of the body and tail of the pancreas. Unless better methods of diagnosis are available, the prognosis remains poor".

Profs V.G. Griffiths : "It is true that this case is unusual in the rapidity of deterioration and such massive liver involvement?".

Profs G.P. Xuereb : "Each tumour has its own peculiarities in its natural history. The primary tumour remained confined locally, to the end and did not involve the duodenum. It did, however, show a marked proness to spread. The tumour mass in the liver was far larger than the pancreatic primary; the metastatic deposit in the spleen was large compared to the tiny seedlings in the lungs. The haematogenous spread to the lungs is more likely to have occured from the liver deposits, than from spleen. Both were markedly adherent to the diaphragm; perhaps this was the cause of pain? We can assume that metastatic activity in the liver could have been going on for one year. The terminal events were determined by obstruction of the bile duct. Necrosis in the tumour would account for some electrophoretic changes suggesting hepatitis.

The paper referred to by Mr. Parnis was very interesting and appeared about four years ago: carcinoma of pancreas is more prevalent is diabetic patients."

Mr. R. Attard : "A paper appeared last May in the "British Journal of Surgery", 1 in which a careful study was made of 260 proven cases of carcinoma of the pancreas with diabetes mellitus shown in 20% of the cases. It appears that any patient over 60 years of age who has developed diabetes recently with jaundice should be suspected of having carcinoma of the pancreas. It has been stated to be 10% commoner in diabetes than in non-diabetics. My impression is that, in Malta, carcinoma of the pancreas is commoner in diabetes."

Profs V.G. Griffiths : "As to the actual incidence of carcinoma of the head of the pancreas, I can say that it is a relatively common tumour. Each one of us would operate on some 6 to 8 cases a year, and sees a few upon whom he does not operate.

There have been recent investigations on the relative incidence of carcinoma of the pancreas and chronic pancreatitis. There have been cases diagnosed at operation as chronic pancreatitis who died within one or two years, These were really cases of carcinoma of pancreas. Therefore, carcinoma of the pancreas is commer than originally thought."

Mr. J. Muscat : "In the absence of dilatation of the extra hepatic biliary ducts, could the jaundice be due to hepatic metastases rather than to common bile duct obstruction by the primary growth?"

Profs G.P. Xuereb : "A bit of both. I would like to refer back to the association between diabetes mellitus and carcinoma of the pancreas. The surgeons here could be seeing from 30 - 40 cases of carcinoma pancreas a year. This is quite a large number. We have been brought up with the idea that carcinoma of the pancreas accounts for 1% of all malignancies. This is less than the tentative figures Profs Griffiths quoted. Could Mr Attard tell us if the relationship between diabetes and the extent of the disease has been worked out by Kyle and others1?".

Mr. R. Attard : "Not that I know of."

Profs V.G. Griffiths : "Research in the clinical records should give the answer to the relationship between diabetes and pancreatic cancer. The figures I gave were a very rough estimate".

Mr V. Amato. (7) : "The cancer register

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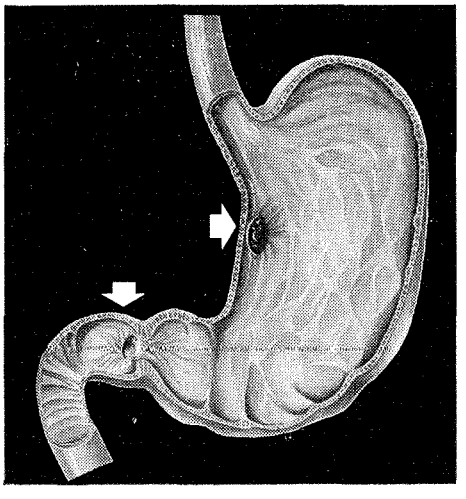

REFERENCES

1. Horwich, L. & Galloway, R., Brit. med. J., 1965, **2,** 1274.
2. Hunt, T, Med. Dig. (Lond.), 1965, **10,** 222.
3. Today's Drugs, Brit. med. J., 1964, **1,** 1690.
4. Editorial Synopsis, Gut, 1965, **6,** 19.
5. Galloway, R., Symposium on Carbenoxolone Sodium, London. Butterworths (1968).
6. Craig, O., et. al. Practitioner, 1967, **199,** 109.
7. Cliff, J.M., Symposium on Carbenoxolone Sodium, London. Butterworths (1968).
8. Lawrence, H., et al. Ibid.
9. Hunt, T.C. Ibid.

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might help in this investigation. There should not be too much difficulty in diagnosing pain in the back if one remember that embryologically the pancreas is a foregut structure, and visceral pain from it radiates forwards to the anterior abdominal wall; while pain from the spine being somatic in origin, radiates segmentally round the body wall."

Profs V.G. Griffiths : "Perhaps Mr Attard can now tell us about carcinoma of the pancreas in general"?"

Mr R. Attard : "Carcinoma head of pancreas accounts for 3.8 to 4% of all cancer, and 6% of cancer of the gastro-intestinal tract. It usually presents as a painless jaundice — actually about 45% present thus; the rest present as *painful* jaundice. The presenting sign is painful jaundice in most cases, but not in all. Pain is deep and gnawing and long-standing — not colicky; it is usually epigastric, but may radiate deeply to the back. The pain usually preceeds the jaundice: all investigations at this early stage are usually negative and the diagnosis is missed, but the marked anorexia and weight loss should put one on his guard.

Soon jaundice appears and becomes severe, deep and unremitting. There is an association with diabetes and also with superficial thrombophlebitis, especially in the pre-icteric phase. Thrombophlebitis migrans may be an important factor in the diagnosis but occurs in only 5 - 8% of individuals. The age incidence is that of cancer in general. Males are more frequent, but not markedly so. Clinically, there is jaundice with no bilirubin in the urine, and clay-coloured faeces. Pruritus may be severe. A large liver is the rule, the larger the liver, the more likely is it to be due to malignancy. In 65% of cases an enlarged gall-bladder is palpable in some other cases the gall-bladder is enlarged but not palpable.

The diagnosis is made on the history and the palpabable gall-bladder. In other cases, the diagnosis is often confused by lab. investigations, which are not particularly helpful. The serum bilirubin is high 12-20mg/100ml. Van Den Bergh is immediatly directly positive. The transaminases are low. The alkaline phosphatases is high — over 30 K.A. Units/100ml. However the results of these investigations are not invariable so, in practice.

Radiological investigations, on the whole are not particularly helpful. Plain X-rays show nothing. Duodenography may show widening of the dudenal curve. Arteriography and scintogram may be helpful but are advanced techniques. Cholycystograms are not done because of the presence of jaundice. Percutaneous transhepatic cholangiography may be helpful but should be done in the operating theatre with preparation for laparotomy Peritoneoscopy requires experience in its use. Laparotomy is an important diagnostic procedure.

Only 10% of the cases are operable; usually a palliative by-pass procedure is done, such as cholecystojejunstomy; this only relieves the jaundice and pruritus to make the remaining few months or weeks of life more comfortable for the patient. In those conditions where the condition is operable a pancreato-duodenectomy may be done.

Spread is usually by direct spread to the duodenum, omentum, regional lymphatics and portal vein to the liver. The para-aortic, mediastinal and supra-clavicular lymph nodes may be involved. Less common sites for metastases the lung, spleen, adrenals, skeletal system etc.

Carcinoma of the head of the pancreas is different from that of the ampulla of Vater in the symptomatology and prognosis. Carcinoma of the Ampulla accounts for 40% of carcinomas in that region. Once again, jaundice is not the first presenting symptom except in 25% of cases. Epigastric pain, fever and weight loss are common. The history often suggests cholangitis, cholecystitis, biliary colic, or pancreatitis. One must be on one's guard for the condition for, diagnosed early, this is amenable to treatment.

Intermittent obstructive jaundice appears early in the history and should help in diagnosing the condition earlier. Jaundice is intermittent because the obstructing tumour occasionally sloughs off partially relieving the obstruction. Those tumours bleed into duodenum; this does not occur in carcinoma of the pancreas: therefore, the presence of occult blood in the stools or in the duodenal aspirate (vomit), together with absence of bile in duodenal juice, is pathognomic of this condition. The final diagnosis is made at laparotomy. Treatment, in the operable cases, is pancreatico-duodenectomy."

Profs V.G. Griffiths : "I am glad that Mr Attard included carcinoma of the ampulla and has mentioned that occult blood is more comconly present in this than in carcinoma of the pancreas. It has also been said that these patients bleed fairly substantially into the lumen leading, because of the concommitant absence of bile, to the "silvery grey or aluminium coloured stool."

In practice, obstructive jaundice may be due to stones in the common bile duct (90%) or to carcinoma head of pancreas (10%); other conditions include carcinoma of common bile duct, foreign body or worms in common bile duct. Differential points are the character of

the pain (colicky, constant or absent) and the jaundice (fluctuant or progressive).

Some cases of carcinoma head of pancreas are subjected to Whipple's Pancreatico-duodenectomy (1949-50), this operation has a formidable mortality (over 50%) in the best hands, and the vast majority of the survivors die of recurrence. Therefore, palliative operations are are generally preferred. In the case of a small ampullary growth, it is still worthwhile subjecting the patient to the Whipple procedure, for here the cure rate is more encouraging. In carcinoma of head of pancreas, the simple bypass is well worth doing for it gives considerable relief of jaundice and pruritus, and may achieve survival of the patient in relatively good health for one to three years.

Carcinoma of the body and tail

There are some points worthy of mention about carcinoma of the body and tail of pancreas:

i. Like carcinoma of the head, but without jaundice, since the latter does not involve the common bile duct.

ii. Carcinoma of the body of the pancreas is treacherous and difficult to diagnose. Very few investigations are possible.

iii. Diagnosis is often reached by exclusion — ie negative Barium meal, occult blood, etc. fail to prove carcinoma of the stomach. Hence the dictum may be coined: "what clinically should be carcinoma of the stomach, but turns out not to be carcinoma of the stomach, is carcinoma of the pancreas."

iv. Pain, anorexia and weight loss may be the cardinal presenting symptoms.

v. The tumour is sometimes very small and the diagnosis made by discovery of metastases.

vi. Functionally, the tumour does not cause any disturbance of the exocrine secretion of the pancreas by these tumours.

vii. Another way of presentation is as a mass in the abdomen, or

viii. Severe progressive intractable pain.

In conclusion, this tumour is difficult to diagnose but should be suspected if any of the above are present."

Mr J. Muscat : "What does Profs Griffiths consider to be the indication for laporotomy in this context?"

Prof V.G. Griffiths : "If you suspect a carcinoma and its presence is not proved by investigations available, one should proceed to laparrotomy, especially if there is progressive deterioration of the patient's condition. Recurrent thrombophelebitis migrans may be a feature."

Mr J.B. Pace (8) : "One investigation that may be helpful in diagnosing carcinoma of the pancreas is cytological examination of the duodenal juice. This investigation requires special facilities and experience, but is said to give positive results in 50% of cases."

Profs V.G. Griffiths : "To conclude, I would like to say a few words about the treatment of carcinoma of the body of the pancreas. Few of the tumours are resectable and those are hardly worth resecting in view of the high mortality and poor survival rates. The best carcinoma of the body of pancreas we had took 18 months to die and suffered constant severe, deep boring pain in the left hypochondrium; we thought of all sorts of diagnosis but all investigations were negative; laparotomy revealed a tumour of the tail of the pancreas. This patient died very slowly and very painfully without obvious metestases. It is curious that some tumours remain small and metastasize widely while other grow locally to a large size but do not spread."

SPEAKERS:

1. Mr R. Attard. Part-time lecturer in Surgery, Royal University of Malta. Consultant Surgeon, St. Luke's Hospital, Malta.
2. Professor V.G. Griffiths. Professor of Surgery, Royal University of Malta. Senior Surgeon & Head of the Department of Surgery, St. Luke's Hospital.
3. Professor G.P. Xuereb. Professor of Pathology, Royal University of Malta. Senior pathologist & Head of the Department of Pathology, St. Luke's Hospital.
4. Dr F. Zammit. Consultant Radiologist, St Luke's Hospital.
5. Mr R. Parnis. Formerly a Senior surgical specialist in Nigeria, and associate lecturer in Surgery, University of Ibadan.
6. Mr J. Muscat. Part-time lecturer in Surgery, Royal University of Malta.
   Consultant Surgeon, St Luke's Hospital, Malta.
7. Mr V. Amato. Part-time lecturer in Orthopaedica, Royal University of Malta. Orthopaedic Surgeon, St Luke's Hospital.
8. Mr J.B. Pace. Full-time Lecturer in Surgery, Royal University of Malta. Surgical Registrar, St Luke's Hospital.

REFERENCE: 1

The Association between Carcinoma of the Pancreas and Diabetes Mellitus A.J. Karmody and J. Kyle. **British Journal of Surgery,** May 1969, Vol. 56 No. 5, p 362-364.

ACKNOWLEDGEMENTS

We wish to thank Professor Griffiths and Professor Xuereb for permission to publish the records of the Clinicopathological Conference. We are also grateful to Mr Attard who kindly allowed us to publish his case and who presented the case. Lastly we feel indebted to Mr Pace who so patiently records these interesting sessions.

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sleep - its physiology & pathology

tonio j. bugeja

Sleep as Oswald put it "is a recurrent, healthy condition of inertia and unresponsiveness associated with various physiological changes"; so much so that the knee-jerk disappears (though some superficial reflexes remain), urine secretion decreases, stomach secretion is reduced (inspite of increased hunger contractions), heart rate slows down (due to general body inactivity) and the blood pressure falls. The B.M.R., oxygen saturation and rate of respiration all tend to decline, so that there is a general reduction of activity. Yet recent findings about sleep indicate that it is not merely an inactivation but a different sort of vigilance and activity. The *REM* state of sleep alone, is considered on the basis of certain biochemical evidence as an active state controlled at the level of the brain stem and marked by increased cerebral metabolism. Despite a seemingly sophisticated arrangement to ensure motor paralysis through the reduction of tonic and spinal reflexes in sleep there is during the *REM* phase an outbreak of diffuse motor-impulses within the central nervous system.

THE SLEEP — AROUSAL CYCLE

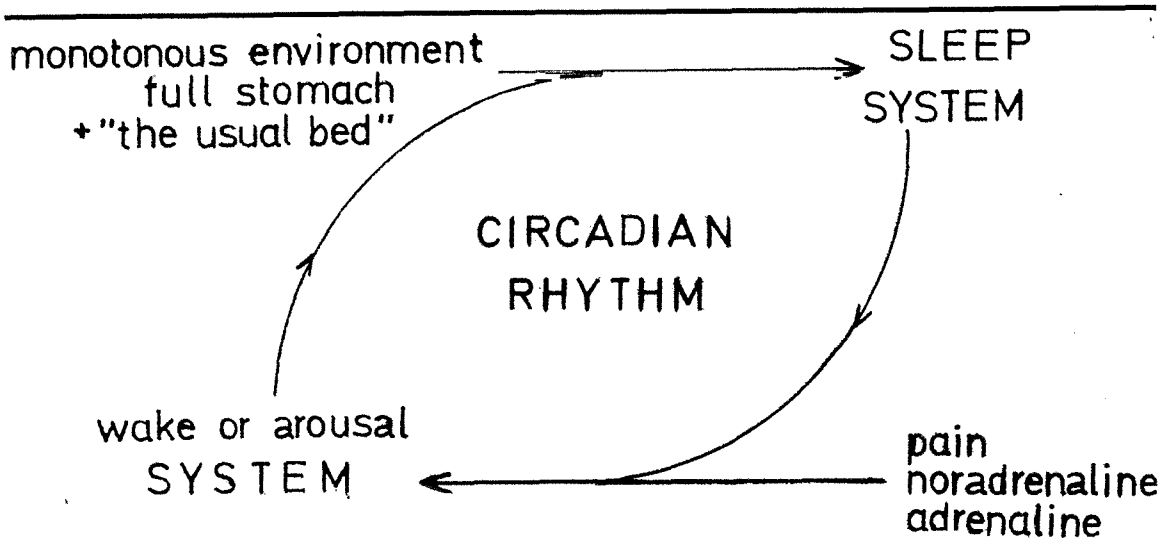
The mechanism of sleep-arousal cycles is not as yet established with certainty though we know that the sympathetic system is predominant in states of excitability and wakefulness while the parasympathetic largely takes over when sleep ensues. Hess postulated a sleep-centre in the thalamus, activation of which leads to sleep; Lindsley on the other hand later on thought that sleep is due to a "tonically acting arousal system"; the waking system of the brain is in fact today known to be the *ascending reticular activating system of Moruzzi and Maggoun* at the level of the mesencephalon; Fairly recent experiments have now demonstrated that stimulation of different mid-brain areas can produce arousal or sleep and it is now thought that the balance between the two states is determined by two antagonistic systems, reciprocally inhibitory. Furthermore the ascending reticular system probably mediates both, depending on the frequency stimulation through a polysynaptic pathway (and therefore requiring considerable temporal summation of successive stimuli) causes arousal which low frequency stimulation though a di-or trisynaptic one leads to drowsiness or sleep. Even more recently a "hypnogenic circuit" was postulated. This pathway involves the limbic system, preoptic region of the hypothalamus, interpeduncular nucleus and tegmentum. Acetylcholine crystal implantation in these regions induces sleep in cats.

Simply explained, when the arousal system is predominant it inhibits the sleep system. After some time however this inhibition diminished and the sleep system takes over gradually. There are further excitatory influences to both systems, these being direct and conditioned neural pathways and possibly chemical factors as well. While sleep is therefore facilitated by such visceral stimuli as a monotonous environment, a full stomach or a satisfied mating urge and conditioned reflexes as "the usual bed", arousal can be induced by the sensation of pain or perhaps by adrenaline. The awake-sleep balance thus depends not only on the inherent rythmicity of the mutually antagonistic systems but also on the impulses reaching these systems. A new excitation can even produce a partial or complete arousal.

It is worth mentioning here that the cortex can influence the neural excitations affecting arousal by acting on the afferent impulses. Besides the sensory stimuli these systems are affected by the "limbic system" (fibres connecting cortex and mid-brain and concrned with anxiety and emotions). Thus the hippocampal part of the limbic system gives sleep when the "emotion centre" is quiet while insomnia results in upset conditions. Experiments by Koller and Graber in 1963 pointed towards the existence of a sleep factor which was later isolated from the blood by dialysis by Honnier and Hosli. When it was injected into recipient rabbits these fell asleep soon afterwards and gave normal EEG records.

PARADOXICAL AND SLOW SLEEP

We can go deeper into recent findings on the subject by treating the so-called paradoxical and slow sleep separately. The former also known as Rapid Eye Movement[7], deep, fast wave, desynchronised or dreaming sleep refers to periods of sleep when muscular activity disappears completely, these are rapid eye movements and spikes of high voltage appear at the level of the pontine reticular formation, just



behind the mid-brain. Slow sleep is the orthodox sleep which often precedes it. Here cortical activity of the waking state slows down to slow waves of high voltage.

By making sections at various parts of the central nervous system it has been found that structures responsible for paradoxical sleep are situated at the level of the pons. Furthermore these lesions which suppress the tonic phenomena (paradoxical sleep is marked by tonic cortical and subcortical activity as well as phasic high voltage spikes corresponding respectively to muscular atonia and rapid eye movements) have been found to coincide with the region of locus coeruleus nuclei. These nuclei are rich in monoamino-oxidese, an enzyme playing a role in monoamine catabolism. They are in fact almost exclusively composed of neurones containing noradrenaline. MAO inhibitors have been found to permit the elective suppression of paradoxical sleep for a very long period, without affecting either waking or slow sleep (Normally increased paradoxical sleep period during recuperation of such lost sleep is approximately equal to half the duration of the experimental deprivation).

CEREBRAL SEROTONIN

Now histological techniques have led to the discovery of the existence of nervous structures inhibiting the reticular activating system. These have revealed the existence at the level of the raphe nuclei, situated exactly along the midline of the brain stem, of a system of neurones showing yellow fluorescence under u-v light. This fluorescence is due to neurones containing serotonin. Besides neuropharmacological indications of the role of seroronin in sleep, it has now been established (Michel Jouvet 1967) that a close correlation exists between the quantity of cerebral serotonin and the amount of time spent sleeping. In fact the greater a lesion of the raphe system, the greater the decrease in cerebral seroronin and the greater the time of wakefulness. It thus appears that cerebral monoamines are of great importance to the sleep mechanism.

SEX HORMONES

The many sex hormones of the human body also appear to exert a powerful influence over states of consciousness. Progesterone, for example, the sex hormone responsible for mammary gland and placenta development and others of the twelve sex hormons have been used as sedatives in experiments. Could not hormones be responsible for the exhausted sleep which follows giving birth? All normal women experience some transit between exhileration and depression at the onset of menstuation. Could not this parallel a rise and fall of some particular hormone? If there is a strong connection between sex hormones, sleep and mood, this is not an academic matter for women who take contraceptive or fertility pills every day. These are concentrations of female sex hormones whose action takes place in the brain. The required contraceptive action occurs when the synthetic harmone influences a neural region that affects the pituitary and prevents it from releasing its usual train of hormones that liberate and nourish an egg in the ovary. Instead the brain acts as if pregnancy had already begun. Just as few women react extremely to menstruation or pregnancy a few react to some of these hormones with irritation or depression and in high doses even with transitory psychosis. The compounds make their

impact on brain regions promoting fertility and on those concerned with emotions; thus they affect sleep. Experimental evidence shows that conversely some drugs such as morphine affect fertility.

SLEEP IN DISEASE

Perhaps the most thoroughly understood kind of sleep from the biochemical point of view is the unpleasant sleepiness of people with severe liver disease, resulting on intake of protein foods. Depression, lethargy, disorientation, odd behaviour and sleepiness are symptoms of cirrhosis and eventually lead to coma. The ammonia forming out of the nitrogen from the protein in the intestine cannot be detoxified by the liver. Thus it therefore accumulates and surges through the blood stream to the brain where it affects consciousness.

Research on brain amines may soon allow us to conquer the symptoms of depression, by drugs. The amines, compounds including noradrenaline, seotonin, depamine and tryptamine are chemically related to ammonia. It is now believed as indicated above that certain enzymes may release the potent amines from protein foods of the brain so that a drug that depletes the quantity of brain amines can then make a man depressed and vice versa. As the amine levels change so does the timbre of the personality ,the kind of sleep and its *REM* dreaming. Therefore a M.A.O. inhibitor increases the brain's amine supply giving a cheerful and alert individual after less than eight hours of sleep. Using 5 H.T.P. with M.A.O. inhibitor still increases the amine supply since the former enhances amine production. These drugs are therefore known by the name of "psychic energies."

SLEEP DEPRIVIATION

In the past sleep deprivation has been closely followed and found to be a stress condition met by increased ATP, adenylic acid and fructose diphosphate's specific activities; paradoxical sleep deprivation studied in various animals showed few characteristic troubles and therefore gave no clue of any vital function performed, even though recuperation was always observed. However research uncovered the facts that in the course of evolution slow sleep preceded paradoxical sleep so that reptiles do not have the latter sleeping state, hunted animals have a small percentage of it while animals of prey enjoy a relatively high proportion of it; in contrast paradoxical sleep has been found to precede the appearance of slow sleep in the development of the mammalian young. Studies on hibernation — a very much related subject, have revealed that the critical temperature which triggers off the actual falling to sleep is only the culminating point of a long sequence of physiological changes which represent a yearly rhythm, affected by a wide range of variables which tend to confuse the picture. A reduction in blood circulation and in the respiratory rate with a consequent drop in heat production have been observed during hibernation. The weights of the adrenals and pituitary drop to a third of their "summer weight", the thyroid becomes less active and there is an increased secretion of insulin and serum magnesium. The latter has a considerable effect on the nervous system especially on the parasympathetic. However, while the key secretion seems to be insulin, since it is possible to induce artificial hibernation by injections of insulin coupled with fasting, the exact roles of the pituitary and adrenals has not yet been worked out.

Poor, good, and *abnormal* sleep have also been compared with a view of discovering more about sleep. Experimental records have revealed that a poor sleeper sleeps closer to the waking state than the good sleeper for the simple reason that his heart beat rate is faster by about four beats a minute and his body temperature higher by some 4°F. during sleep The poor sleeper also shifts a lot more in bed and spends considerably less time in the *R.E.M.* period. Using the Cornell Medical Index it was found that the good sleepers are much more healthier. Another analysis also revealed that the poor sleepers are more anxious, introverted, hypochondriacal and emotionally disturbed than the good sleepers. Worse than a good sleeper is the insomniac who is unable to sleep for a good two-thirds of the night. Classed as abnormal sleep is also sleep resultant from narcoleptic, cataleptic seizures. Narcoleptic sleepiness takes place rapidly at wrong times and in peculiar places. About 60% of narcolptic cases however are marked with peculiar reactions to emotion. The subject in the predicament cannot laugh at a joke, spank his child or exhibit any strong feelings without collapsing into the unconscious. Of course sleep in such cases is also marked with transient hallucinations and a state of apparent paralysis upon waking. Even sleep in epilepsy (which is congenital or resulting from brain damages left by a childhood virus disease) follows emotion, fear and convulsions.

CONCLUSION

Therefore the regions of the brain responsible for the three states of the nervous system — wakefulness, sleep and paradoxical sleep have now been mapped out. Chemicals which appear to control those regions have also been identified but the TRUE function of sleep still remains a mystery. A number of observations and recordings are still meaningless and have to be sorted out. It is in fact really strange that a phenomenon can be analysed with such accuracy without this analysis revealing its possible functions. In spite of all this, current research on the topic is expected to lead in the near future, to a good evaluation of many medical problems, not excluding several pathological conditions.

REFERENCES:

.1 Paradoxical sleep by M. Jouvet (Progress in Brain Research 18, 1965).
2. Sleep and Wakefulness by N. Kleitman (1963).
3. Current Research on sleep and dreams by G.G. Luce (1965) Public Health Service Publication no 1389.
4. Sleeping and Waking by I. Oswald (1962).
5. Sleep by G. G. Luce & Julius Segal.
6. Nature of sleep by G. Wolstenholme & M. O'Conner (Ciba symposuim 1960).
7. What happens while you sleep by T. J. Bugeja (IT-TOGA May '60, pg. 6).

a case of von williebrand's disease

charles a. gauci

Von Williebrand's disease is a hereditary haemorrhagic disorder inherited as a dominant characteristic and affecting both sexes. The disease is characterised by three important laboratory findings viz.,

1. An increased bleeding time — this in the acute phase, at other times it may be perfectly normal.
2. A positive Hess's test.
3. A secondary hypochromic anaemia.

The disease is due to an inherited abnormality of the skin capillaries and mucous membranes to which is added in many cases a deficiency in clotting factor VIII. The general features of the disease are not unlike haemophilia, in fact in the old medical literature we see it referred to as haemophilia of the female. The main symptom as is to be expected is a bleeding tendency, which may appear at birth or be latent for years. Commonly affected are the nose, gums, uterus and less commonly the stomach, intestines, urinary tract and joints. There is no associated splenomegaly.

Variants of the above mentioned disease reported in the literature are:

1. Disease + deficiency of factor VIII so called Angiohaemophilia (Klespner and Achenbach 1957).
2. Disease + deficiency of factor XI (Fick et al 1959).
3. Disease + deficiency of factors XI and VIII (Perry et al 1964).
4. Disease + deficiency of factor IX, so called Angiohaemophilia B (Klespner and Achenbach 1957).
5. Disease + deficiency of factor VIII + platelet abnormality (Raccuglia and Neel 1960)

CASE REPORT

This case patient was clerked by me during my stay at the Cardiff Royal Infirmary in August 1969.

K. S. a boy 13 years old was referred to the William Diamond ward with a history of spontaneous epistaxis from the left nostril two days prior to admission. A piece of cotton wool soaked in adrenaline pushed up the nostril controlled the bleeding temporarily, but this occurred again the day before admission, and the patient was sent to hospital.

On examination there was nothing abnormal in any of the boy's systems but a look at his past notes revealed that he was referred to the Infirmary in 1962 because of recurrent spontaneous epistaxis with no other physical signs: a number of investigations were done on him at that time: *they illustrate very well how a haemorrhagic disorder should be investigated in the laboratory.*

Bleeding time: 15 minutes + (control 2 — 7 minutes)
Platelets: 401,000
Clotting time: 7 minutes (control 5 — 10 minutes)
One stage prothrombin time: 15 seconds
Thromboplastin generation test: N.A.D.
Prothrombin Consumption index: 17%
Factor VIII assay: 65% of normal
Clot retraction test: 55% (control 45 — 64%)
Platelet thrombotic function reported normal in comparison with normal platelets in a dilution of 1 : 4
Result: a prolonged bleeding time and low factor VIII.

The blood of the boy's father and paternal uncle who also suffered from recurrent spontaneous epistaxis was tested and prolonged bleeding times were found in both

Father : 10 minutes
Paternal uncle : 15 minutes +

Thus due to:

1. An abnormal bleeding time in association with perfectly normal platet count clotting time and other relevant values as seen above.
2. Presence of a low factor VIII level
3. Familial trend.

A diagnosis of Von Williebrand's disease was made.

No specific treatment was recommended, but the boy's family was asked to send him to hospital should any haemorrhagic manifestations occur. In 1968 the patient suffered a dislocated radial epiphyses on which surgical intervention was considered necessary. A laboratory

check on the patient's blood showed that the bleeding time was 15 minutes and the factor VIII level was 33%: naturally this was not an ideal state of affairs in which to operate, so the boy was given one litre of frozen plasma — this to act as a source of factor VIII, as a result of which the bleeding time fell to 7 minutes and the factor VIII level rose to 50%. The operation was successful and the patient leads a very active life: he is a member of the school rugby team and plays cricket and soccer.

TREATMENT

Thus no specific treatment is possible: one lets the patient lead an active and healthy life and in cases of bleeding episodes such as epistaxis or prolonged bleeding after a tooth extraction, cotton wool swabs soaked in adrenaline are advisable and if these fail to stop the bleeding, early hospitalisation is indicated. In hospital symptomatic treatment is given and in severe cases factor VIII may be supplied (when necessary) by frozen plasma infusions. The intrinsic defect in the capillary wall, the whole basis of Von Williebrand's disease, cannot, for the time being at least, be affected by any method of treatment.

ACKNOWLEDGEMENT

I wish to thank Professor H. Scarbourough — Professor of Medicine at the Welsh National School of Medicine — for permission to report this case.

clerking in pathology at the royal free - arthur felice

Leaving the hot humidity of the Maltese summer, I left for London thinking in terms of the magnificent weather reports splashed on the front pages of the English papers. However all the way from the Southern Coast of Sicily to Heathrow Airport, I could see nothing but an uninterrupted carpet of grey clouds, whilst peeping hopefully out of the Comet airliner window. Thus, failing to see the Alps, I contented myself with admiring an equally 'mountainous' (at the right sites) air-hostess. By the time I stepped out of the aircraft, armed with my unmistakeable waterproof and beret, I had philosophically accepted the inevitable — my first taste of typical British weather could not elude me..... and did not. To make matters even more trying, my London taxi-driver decided to emulate his Maltese colleagues by grossly over charging, after driving me from the air-terminal to the Obstetrics Unit of The Royal Free Hospital at Liverpool Rd. in the most roundabout way one could imagine. This rather unpleasant first experience was, however, more than erased by what was to follow during that unforgettable month of August.

The arrival of a Maltese student at Liverpool Rd. did not cause any surprise. Two colleagues of mine: Tony Leone Ganado and Anthony Felice (some A. Felice or other can be found almost anywhere) had been living there during the whole month of July. Later we came to know that this multiple A. Felice business had caused quite a lot of confusion. It was a good thing that the other A. Felice had decided to go to Milan.

I was welcomed by Professor Hill at the main unit of the Royal Free Hospital at Gray's Inn Rd. This most hospitable gentleman introduced me to some members of the staff and, what was more important, to the senior students doing Pathology, with whom I was to spend the rest of the month. There I was soon joined by my colleague Martin Anthony Williams. Thus I got acquainted with two groups of students: those doing Pathology at Gray's Inn Rd. — an affectionate well-balanced lot, and the swinging automobile-crazy crowd living in at Liverpool Rd., doing Obstetrics when they have finished with other, equally 'instructive', business. The fact that the Maltese are hospitable has been repeated 'ad nauseam' but certainly these people were none the less to me. Who ever said that the British are cold, reserved and toffee-nosed? I think that if one adopts the right attitude, British sense of humour coupled with Maltese fiery temperament, mixed with a pinch of self respect, could result in a very warm and bubbly cocktail.

As to the academic side, the staff at the Royal Free do not seem to be anything like as keen on lectures as we are. In fact they only used to have four lectures a week. The rest of the week was occupied by pot sessions (3 or 4 a week), postmortems, surgical, gynae and staff-autopsy conferences, surgical demonstrations, combined staff meeting and discussions (e.g. Journal Club where the week's BMJ was discussed etc). Anybody interested in a particularly important topic, could listen to a lecture delivered by an

authority on the subject recorded on a tape and accompanied by numbered slides, which one could view on a small screen while listening. Thus one could pace himself so as to reap the maximum benefit out of the lecture. This is something we could set up ourselves. It is extremely practical and not at all that costly considering the benefits. (After all the Arts Faculty have their language laboratories, which are similar, and if anything, require more staff supervision). The balance at the R.F.H. thus leans more on short practical sessions and conferences. Included in the curriculum were weekly visits to the Wellcome Museum or to other specialized institutes and hospitals in the vicinity. The only snag about their time-table was that it was extremely inconsistent and variable so that one could find himself missing an interesting pot-session or demonstration as easily as anything.

Extracurricular life was extremely pleasant and instructive, even though quite exhausting. As everybody knows, there is quite a lot to do and see in London. In fact, drawing a timetable, (so that one can get in as much experience as possible,) is a major problem. I think all the students who were clerking in London this summer would agree that we did very well in that respect. We did quite a lot of 'roaming around'. Those who, like me are fond of classical and semi-classical music had their fill at The Royal Albert Hall and Holland Park, while those keen on theatre did satisfy their appetite at The Criterion (Brief Lives with Roy Dotrics), at The Duke of Yorks' (Arthur Miller's The Price) etc. Those who had other interests (e.g. horse riding etc etc!!) must surely have found ways and means to satisfy them.

As regards the accomodation I was more than satisfied. The rooms are very small but very cosy, while the food was typically tasteless but quite healthy. One should not be put off by the architectural monstrosities of the several R.F.H. units. The trained clinical and artistic eye (mostly the latter) will have its own share when the human element (whether student or nurse) is critically evaluated.

This was thus a most enjoyable and profitabel clerkship and I would recommend the R. F. H. to anybody who wants to clerk in London and knows how to combine work and play in the right dosage. The only snag about it is the air fare — £42. 10. 0 — return fare permitting only one month stay, after which the price goes up by a further £20. If one can manage this in some way or other, I strongly recommend clerking for two months. *It will be worth every penny spent on it.*

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clerking amidst seven hills - joe grech attard

Being one of the seven lucky students awarded a scholarship by the Italian Embassy in Malta, I was very much excited when on the 13th July 1969 I boarded the 'Sicilia' and took off for Rome. The Embassy had kindly offered all scholarship students a 75% reduction on the sea trip so that the return fare from Malta to Rome had only come to cost me about £10. The scholarship itself consisted of £60 per month for 2 months and I had to clerk at the Policlinico Agostino Gemelli, in Rome. This Policlinico is a recent 12-storey building belonging to the 'Universita Cattolica del Sacro Cuore'. On arriving in Rome the National Italian Students' Association, the C.R.U.E.I., kindly found a place for sleeping for a few days. However it did not take me and three others, also bound for the Policlinico, long to find a room just opposite Rome's magnificent Railway Station, paying only about 10/- per head each day.

What I had heard previously from students who had clerked in Rome (in Government Hospitals) was not so encouraging, but on my very first visit to Monte Mario, where the Policlinico Gemelli is situated, I was astounded by this ultra-modern, newly-built hospital equipped with the most recent of Medical instruments and apparata and situated in the outskirts of Rome on one of the seven hills.

During my stay I was assigned to Prof. A. Puglionisi, Head of the Department of Surgical Pathology who welcomed me heartily and introduced me to his staff among whom was Prof. C. Piciocchi with whom I really spent most of my time in hospital. Despite his young age Prof. Piciocchi can truly boast of being a very fast and accurate surgeon as well as a nervous, fussy typical Italian, especially so in his English translations and pronounciation. Making friends with all the staff was very easy indeed and my working hours, on the Professor's advice, consisted of 3 to 4 hours every morning, week-ends excluded. Ward rounds were held twice a day, each day of the week, while three mornings a week I spent in

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No hepatotoxic or nephrotoxic effect. Because of rapid excretion (about 90% within 24 hours), no risk of cumulation and no tendency to hypoglycaemia. Gastro-intestinal upset and allergic reactions are very rare. No general cross allergy with sulphonylureas. Promotion of glycogen storage in the liver.

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the operating theatres where anti-sepsis is scrupulously observed, foot pedals for closing and opening doors, a 'scrub-up' room, a dressing room, air-conditioning, etc together with a display of the finest of instruments. Arterial surgery was the Professor's speciality and many a time was I fascinated by watching him performing an arterial by-pass grafting or an arteriotomy with vein patching, or a thromboendarterectomy. Both pre-and post-operative tratment were taken very seriously, sometimes more than the actual surgery.

Taking a history in Italian was difficult when I first arrived but I very soon got used to it and I can recall hearing from some patients who had been pilots during last World War how they used to drop their bombs around Malta, in the sea instead of over land, since the Island meant so much to them. This was bound to make history-taking quite amusing and interesting!

During my stay in Hospital I managed to follow up cases in the Medical Wards too as well as do a little work in the Casualty Department and have a look at the Pathology Laboratories which are incredibly efficient. Quite advantageous is the fact that many of the Hospital's staff go on holiday at the same time, so that when the last week of August arrived the hospital was run by a skelton staff — and for a 'skelton' of patients! I then took the opportunity to visit places further north like Florence, Venice, Bologna, the Alps, etc, In Milan I visited the Policlinico over there where a fellow medical student from Malta was clerking. Besides the limited environment of the 'Duomo', the Electron Microscope in the Pathology Department was the only other thing to admire in my very short visit.

As for food the Italians are exceptional. The Students' Quarters at Monte Mario was only about 200 yards from the hospital. Besides providing good, cheap food, I had the opportunity to make new acquaintances especially during the period when Summer Schools in the various subjects commenced.

Rome with its environments, like Tivoli, Ostia and the Lakes of Freggene and Albano, provide very busy and sometimes tiring weekends. Travel is cheap, food is good, sightseeing endless — all this, plus good hospitality and work in a marvellous hospital, made me throw quite a number of coins in the Fountain of Trevi!

I would like therefore to thank the Italian Embassy for providing the scholarship and Prof. C. A. Dorgio for all the assistance and information he gave me. I would also like to extend my gratitude to all who helped me in Monte Mario as well as to my Dean at that time for granting me permssion to clerk abroad.

Lastly I would like to ask the authorities concerned to try and set up such scholarships for medical students in years to come. It is a really great pity that few, if any, such scholarships are being offered to medical students this year, and I sincerely hope this will be taken into account by the authorities concerned.

---

working for money

- c. swain - j.v. psaila

It is amazing what some people will do for money; but when we arrived at the Royal Free Hospital at Gray's Inn Road we soon appreciated that the haematology lab had more than money to offer.

Firstly there was the work itself. This kept constantly pouring into the penthouse laboratories in the form of an endless stream of blood specimens on which we pounced with enthusiasm (sometimes), to smear, stain, and do P.C.V.'s, ESR's and cell counts. W not infrequently indulged in more sophisticated haematology including spectroscopy, differential staining and examination of marrow smears, osmotic fragility tests, sickling and quests for L.E. cells. Some work had to be carried out outside the laboratory, we collected blood specimens from outpatients in a "bleeding room", specially equipped for venaepunctures, and from inpatients in the hospital wards.

Then there were the haematologists and the laboratory technicians. Dr. Fleming, the man in charge, graciously allowed us to attend a series of lectures given by him and other pundits to the local medical students. The laboratory technicians, though not so highly versed in haematology had other qualities to offer — not totally concealed by their starched white coats.

We are grateful to Professor Hill for inviting us to work there and for arranging our accomodation. We also feel indebted to Mr. Osborne, chief technician, whose kind help we found invaluable during our seven week stay, and who offered the same facilities to any two medical students interested in laboratory work for this summer. As someone put it — "It was 'bloody' fun".

wound healing - a reappraisal

brian cronin

part two † towards super-normal wound healing

It has been suggested that surgeons will never be able to compete with the farrier who successfully sewed back into place, with the aid of fresh sprigs and laurel shoots, the entire rear portion of the Lithuanian horse which the intrepid Baron Boris von Müncausen had just ridden under a falling portcullis. (18).

The writer, it is hoped, will be forgiven his enthusiasms when he declines to agree with the above statement.

It is now feasible to restore an amputated hand back to its owner with successful functional results. Examples of noses and ears being regrafted back to their original state after amputation are now quite commonplace. The meteoric boost that Professor Christian Barnard initiated in December 1967 in the form of the first attempt at human cardiac transplantation is now famous (or notorious!). Whichever way it is regarded, it was certainly a revolution. Kidney transplantations are now fairly routine procedures in some hospitals (26 such operations were performed last year in the Cardiff Royal Infirmary), and pioneering attempts are being made at liver transplants.

The role of "spare part surgery" has come increasingly to the fore in the last five years. Longmore (19) states that "Medicine has always operated in two sectors: Therapeutics and Surgery, the former being largely concerned with external attack and the latter with internal breakdown."

Paradoxically, the increasing success of Therapeutics has thrown an ever-increasing burden on Surgery. People who might have died from a communicable disease before their third decade are now living on into middle and old age, thus becoming candidates for degenerative diseases and disorders. Surgeons can thus look forward to more operations on individuals in whom it is well recognised that wound healing powers are diminishing. Thus the need for better methods of wound healing is imperative.

Bullough argues that since hundreds of millions of years of evolution lie behind the organization of any modern animal, and a strong selective advantage must have been enjoyed by any individual with an unusually effective wound healing capacity, it is possible that in any modern animal the mechanism of wound healing and tissue regeneration may already have approached its maximum possible efficiency. From this conclusion he argues that if it is so, then the only practical treatment of wounds must be to ensure that no adverse circumstances such as infection are allowed to impede the natural processes.

So far only the "Hows" (or proximate causes) of wound healing have been discussed.

THE PHILOSOPHY OF WOUND HEALING

Why does wound healing occur?

This question is asked by Spilsbury (20).

When one considers that there is an average of one new minor wound a week in any individual, *i.e. 3,500 or more* in a lifespan of 70 years, then there is scarcely any doubt that wound healing plays an important part in the life and survival of animals.

There can be no survival without repair. However, the power of repair bears an inverse relationship to the complexity of the organism (21). (See Figure 6).

The reason is probably that the degree of morphological and particularly histological differentiation is dircetly related to the grade so that the dedifferentiation necessary as a prelude to regeneration becomes increasingly difficult or uneconomic.

The Second Law of Thermodynamics and its suggested relevance to wound healing:—

The sea cucumber, Holothuria, clings to tropical reefs and lives by filtering large amounts of sea water through its alimentary tract, and

† *Part one appeared in Chestpiece September 69*

ingesting organic matter from it. When frightened, it has the habit of ejecting its whole alimentary tract into the sea water as a sort of smoke screen. Thereafter, it regenerates a new alimentary tract without apparent difficulty. By contrast, homo sapiens has great difficulty in repairing a perforated duodenal ulcer.

From such examples Schrödinger attempts to draw on the Second Law of Thermodynamics to try to explain these phenomena in physical terms. The Second Law of Thermodynamics states that in any physical change, free energy declines and entropy (energy unavailable for use) increases. Thus entropy can be thought of as the measure of the chaos or randomness of a system.

In the above example of Holothuria versus man's weak regenerative power, the Holothuria may be regarded, according to Schrödinger's analogy, as having a **low** entropy, while man has a **high** entropy.

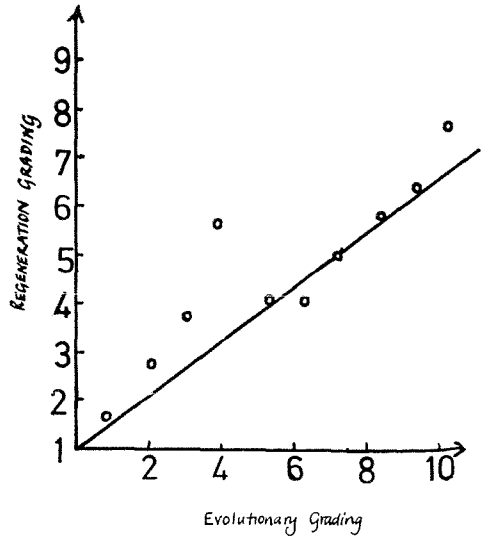
When examining wound healing we are observing mechanisms evolved over millions of years, which are part of the powers to resist entropy. It may be pertinent to note that some authors think in terms of the Second Law of Thermodynamics as being applicable in the case of man only after death.

Why should the process of regeneration of antlers in stage enter into the field of consideration in human wound healing?

Stags' antlers are covered by velvet until fully grown and the whole vast area of skin is regenerated from a small area of tissue which healed over the scar left when the previous year's antlers were shed. (22). In the growing antler it has been shown by Billingham that the hair follicles form *de novo*, a very rare event in other mammals and a fact of much interest to embryologists. If wound healing is regarded as a proximate cause of antler growth, then one might speculate that the final cause of the evolution of antlers might have involved modification of wound healing in structures especially vulnerable to injury. Deer regenerate skin over the metatarsals in the same makeshift manner as in other mammals. The reason why antlers regenerate in such a way could lead to the introduction of completely new concepts regarding wounds and their healing.

"Mind-bending" breakthroughs in the field of Soviet research, led by Professor Lev Polzhaev have revealed a completely new method of increasing the powers of repair in man. He suggests that it is not necessarily so that man's capacity to restore lost tissues and damaged organs is severely restricted. Ethical and moral problems introduced by cardiac transplants may become redundant, should the intriguing possibility come to fruition (23) of causing regeneration of heart muscle to replace that lost through disease.

FIGURE 6



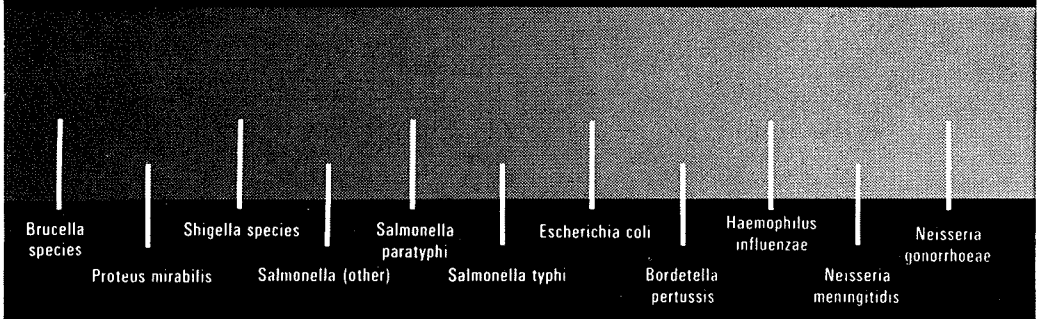
Evolutionary Regeneration grading

1. Primitive Diploblastica	1. Regenerates whole body from mass of dissociated cells
2. Diploplastica with Nervous System	2. Regenerates from small fragments.
3. Mesenchymatous Triploblastica.	3. Regenerates whole body from large fragments only
4. Pseudo Coelomata	4. Regenerates limbs and similar portions of body.
5. Coelomata Triploblastica.	5. Regenerates whole limbs etc. only in special cases
6. Coelomates with Oligomeric Segmentation	6. Can only regenerate fractions smaller than whole limbs.
7. Metameric Coelomates.	7. Repairs only the skin, bones and other tissues.
8. Limbed Metameric Coelomata.	8. Close wounds but do not regenerate tissues.
9. Amphibious, limbed Metameric Coelomata	
10. Terrestial limbed Metameric Coelomata	
11. Homoiothermic Terrestrials	

PENBRITIN

the powerful broad spectrum antibiotic

GRAM-NEGATIVE



with all the advantages of penicillin

Over 1,300 published references endorse the value of Penbritin in the treatment of a wide range of infections. Developed in 1961 by Beecham Research Laboratories, Penbritin is the first antibiotic to combine broad-spectrum activity with the well-known advantages of penicillin therapy—bactericidal action and lack of toxicity.

The following clinical properties of Penbritin make it today's outstanding antibiotic for the treatment of respiratory, urinary, and gastro-intestinal infections.

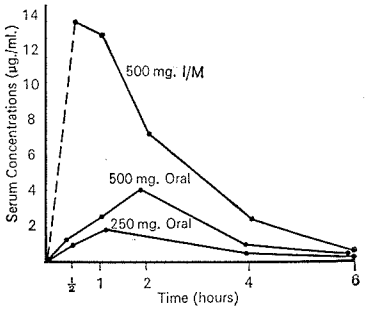
Broad-spectrum activity

Penbritin is active against a wide range of Gram-positive and Gram-negative organisms, including those most frequently responsible for respiratory, urinary and gastro-intestinal infections. In this respect, Penbritin is similar to earlier broad-spectrum antibiotics, but has the added advantages of better absorption, bactericidal action and the greater safety associated with penicillin.

Bactericidal action

Penbritin works harder than other broad-spectrum antibiotics. Bactericidal action means that treatment relies less upon the natural defence mechanisms and more on Penbritin itself, which is of major importance when treating all patients, particularly children and elderly or debilitated patients, where it reduces the risk of relapse and chronicity.

Serum concentrations of Penbritin following oral and intramuscular administration



Penbritin is a product of research at

Beecham Research Laboratories, Brentford, England.

The originators of the New Penicillins

Polezhaev's experiments began while he was still a student. He amputed the hind feet of tadpoles at a late stage in development, damaging one stump with a needle and leaving an undamaged stump as a control. Repeated trauma seemed to produce a dedifferentiation of tissues and a new normal limb resulted, whereas the control stump healed by a normal process of scarification.

He claims to have caused regeneration in cranial bone of dogs. Holes were made in the skull and he used bone dust to stimulate regeneration. Complete regeneration of bone occurred, he claims, in every case, provided that the periosteum and the underlying dura mater were left intact. Regeneration of filled teeth can be obtained by packing the cavity in the tooth with dentine dust (treated with pennicillin) and capping it with temporary filling.

The most astounding claim he makes is that heart muscle can be made to regenerate by using "regeneration stimulators". He even claims to have caused cellular regeneration and reorganization of neurones within the brain!

I wrote to Professor Polezhaev some months ago asking for details of his work, but I am still awaiting a reply.

part three
some personal observations

An understanding of epithelial closure in primary suture wounds led Gillman some years ago to propose a none-suture closure of the skin, a method first practised by the Ancient Egyptians. Gillman has discussed the advantages of the use of adhesive tape (Steristrips) at length in Archives of Surgery 1966 (Dec.). Briefly, these are as follows:—

1. Non-suture closure of the skin avoids necrosis of the wound edges and underlying tissue by sutures which may have been tied too tightly. They eliminate the problem of stitch abcesses.
2. They permit some slight swelling of the wound without an increase in tension of sutures.
3. Steristrips may be left in situ for as long as two to three weeks, thus providing strong support for the wound long after it would be necessary to remove the sutures. Indeed Gillman recommends that the tapes be allowed to remain in situ until they fall off spontaneously.

The use of non-suture closure as a means of keeping skin grafts applied to burns has already been reported locally. (23). It has also been found feasible and satisfactory even in the majority of thoracotomies, as shown by Shepherd. (24). Gibson and Poate (26) outline briefly the use of steristrips in relation to plastic surgery and suggest that their use represents an important advance in the search for a technique that will produce the "invisible scar".

CASE 1.

The use of steristrips as a means of temporary closure is helped whilst the patient is awaiting reduction for an underlying fracture. As can be seen, the effect on the patient is not the usual apprehension which attends the preparation of syringes and suture materials!

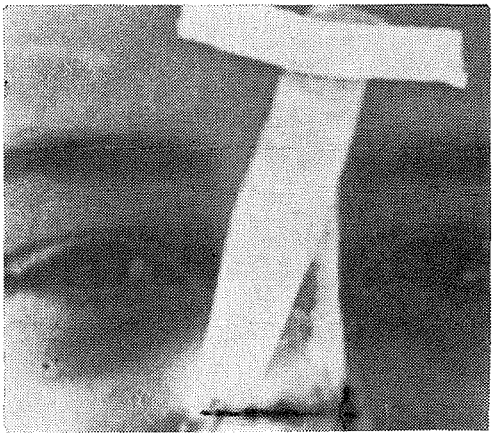


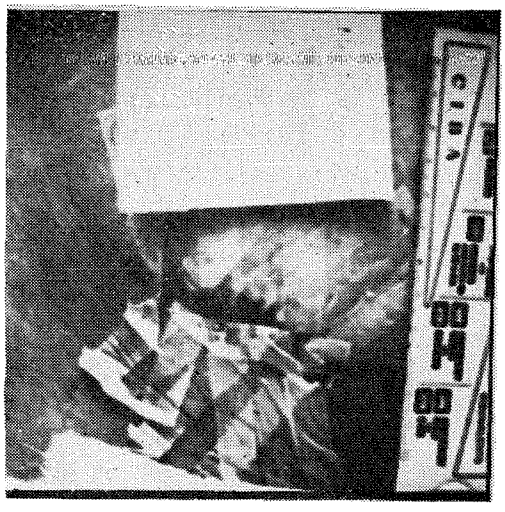
Fig. 7. **(Case 1).**

CASE 2.

The patient was a 38 year old female (fig. 8).

Grossfeld has shown from the results of 44 patients that delayed primary wound closure significantly reduces the incidence of wound infection (2.3% incidence compared with 34.1% incidence with closure performed at initial operation.) (27).

Nevertheless, this patient with an appendicectomy wound closed by the use of steristrips at operation, showed no changes suggestive of infection. There was no dehiscence and no spikes of temperature noted in the temperature chart. She was extremely pleased with the resultant hair-line scar.



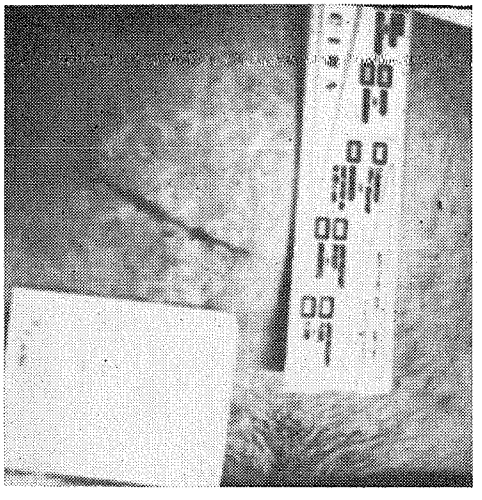
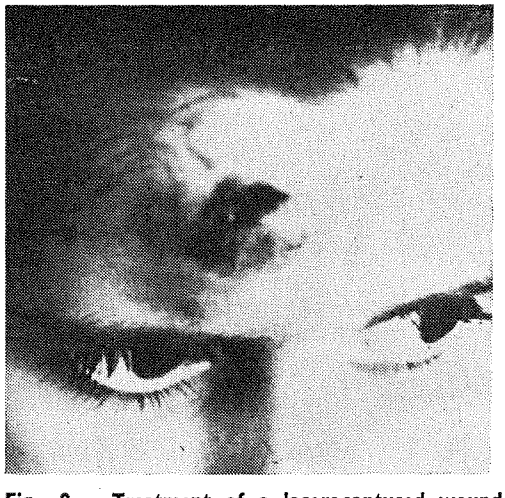


Fig. 8. Female 38 years appendicectomy scar. **(Case 2).**

CASE 3.

A young lad arrived at the Casualty Department, accompanied by his parents and several relatives, all looking very worried. He had a laacerocontused wound on his forehead about an inch in length. Inspection revealed no foreign bodies and bleeding had stopped. After cleansing, the edges of the wound were coapted and held in place by steristrips. The whole procedure took no more than a couple of minutes and the result was excellent (Casualty officer's appraisal at a later date.) The anxiety of child, parents and relatives was dramatically removed. (fig. 9).



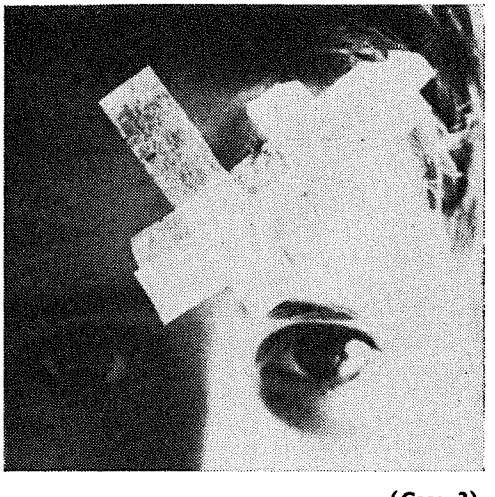


Fig. 9. Treatment of a lacerocontused wound. **(Case 3).**

REFERENCES:

18. Billingham, R.E. and Montagna, W. Advances in Biology of Skin.
19. Longmore, D. Spare Part Surgery Pergamon Press 1968.
20. Spilsbury, R.J. Nature 1961, 192. 1254.
21. Needham, A.E. Ad. Bio. Skin.
22. Goss, R.J. ibid.
23. Polezhaev, L.V. Science Journal Sept. 1968 p. 49
24. Griffiths, V.G. St. Luke's Hospital Gazette 1968 Vol. 2 No. 1
25. Grossfeld, J.L. et al. Ann. of Surgery Nov. 1968.
26. Shepherd, M.P. Brit. J. of Surgery 1966 Vol. 53 No. 3.
27. Gibson & Poate Brit J. Plastic Surgery 1964 Vol. 17 No. 3.

CASE 4.

The patient was a 60 year old male, (A.F.), suffering discomfort from a bilateral inguinal hernia. His state of health was otherwise normal. The hernia on the right side was sutured normally, the hernia on the left side was taped with steristrip. When the patient had his sutures removed on the 8th day there was a spike of temperature (99 F). There was a marked difference in the cosmetic appearance of the taped side compared with the sutured side! Unfortunately the patient did not reappear at Outpatient Department for the resultant scars to be compared (see fig.10).

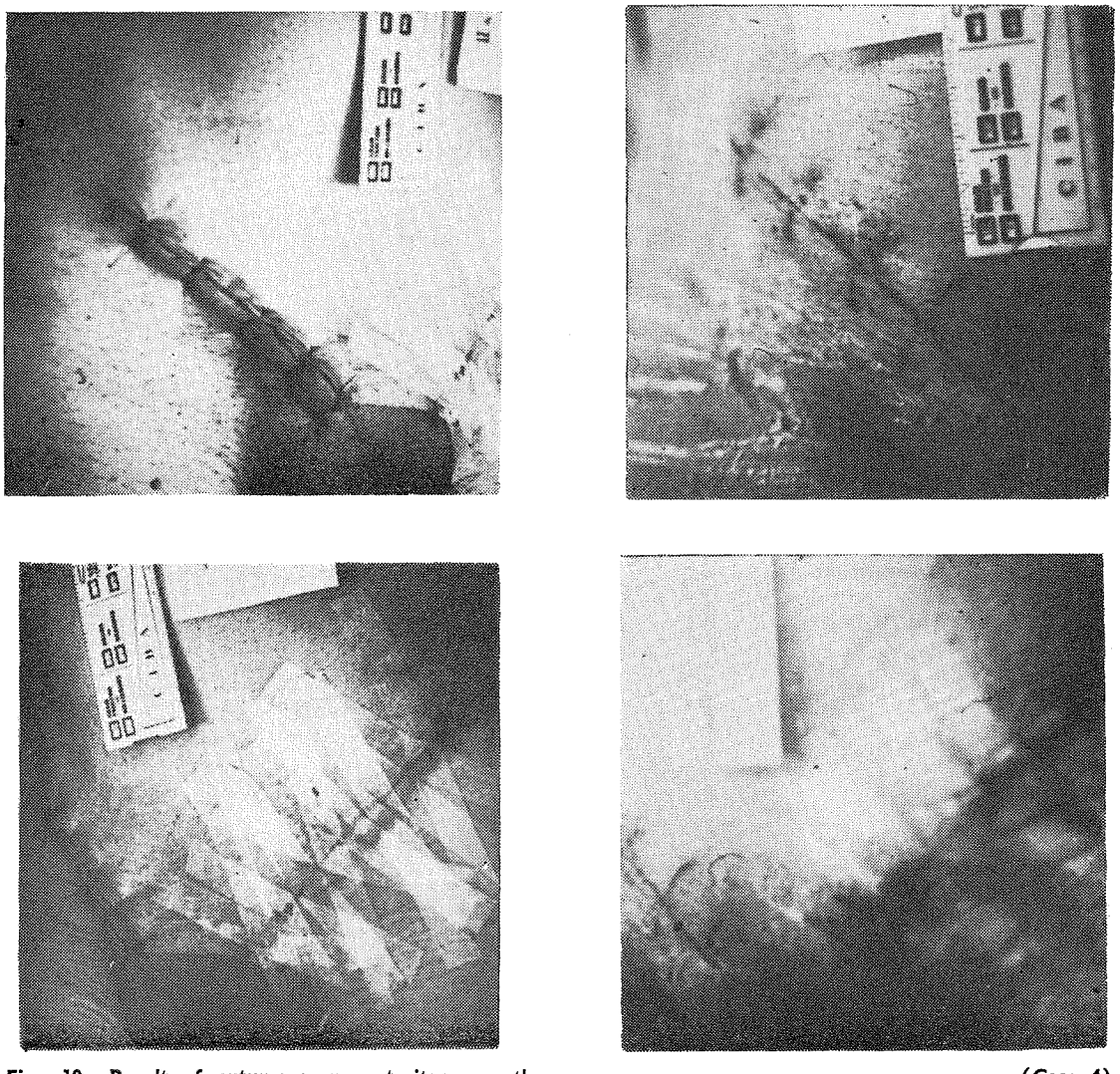


Fig. 10. Result of sutures versus steritape on the same individual, before and after 15 days. (Case 4).

From these examples it seems that closure by means of non-suture materials plays a valuable role in the management and treatment of wounds.

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news, notes & comments

M.M.S.A. DINNER

One hundred and sixty-six gathered together at a dinner, given by the Malta Medical Students Association, in honour of Professors V. G. Griffiths and J. L. Pace on the 18th of December '69. Also there was the Minister of Health, The Hon. Dr. Cachia Zammit and his wife, a large part of St. Luke's Surgical Staff and their wives — besides of course those ubiquitous Medical Students. Being the first occasion of its kind, the dinner was a memorable one; rarely do staff and students meet informally outside the precints of the hospital or lecture hall.

As always the climax came when all were full of food and drink (which was excellent) and the after-dinner speeches given. It soon emerged that the new Professors of Surgery and Anatomy were popular enough with all those present. Nor could any one doubt the sincerity with which they spoke, a quality which never fails to appeal to the Medical Student.

Thus the Department of Anatomy gets a young full-time, enthusiastic, Head of Department. This completes the step whereby both Preclinical Departments are headed by full-time Professors, a significant move in the history of our Medical School. Equally proptitous is the Appointment of Profs. V. G. Griffiths as head of the Department of Surgery.

Naturally, alot of the credit for this very successful evening goes to this year's M.M.S.A. Committee, who so expertly organised the venture.

B.M.S.A. SURVEY OF STUDENT LOCUMS

In an effort to request payment for all student locums done in the U.K. the B.M.S.A. have carried out a survey to find out where student locums where done, at what stage of the course, whether paid or not and if the hospitals concerned could do without the locums.

It will surprise the Maltese Medical Student to know that *All* Medical Schools in U.K. have locums for their students. In fact, B.M.S.A. claim that teaching hospitals outside London and some of the London Schools could not survive without Locums in Dec/Jan and July/August. In Glasgow, two weeks as a locum is part of the curriculm. So far only King's College Hospital and St. Batholomew's offer a payment of £12 10 p.w. — which the B.M.S.A. rightly thinks should be paid for all locums.

RECEIVED BY THE EDITOR

For some time we have been receiving information about new books from Blackwell Scientific Publications Ltd, and the 1969/70 catalogue. Anyone interested may get the catalogue from Blackwell's free of charge or see the Editor.

The president giving his after-dinner speech.

Ultralan

The highly effective corticoid ointment for economic treatment of allergic and inflammatory skin conditions.

Tubes of 10 g. and 30 g.

For detailed information on indications, dosage, mode of action, particular recommendations and contra-indications, please consult the Ultralan scientific brochure and the packing slip.

Schering

Schering AG Berlin

The Editor also wishes to thank for the following student journals sent to him (now in the Student's Quaters Reading Room): The Manchester Medical Gazette, The Royal Free Hospital Jornal, Broadway, The Fuji Medical School journal, Scope, Leech, as well as the two reports from B.M.S.A. on Student Locums and Vocational Training.

Also recieved is a postcard of Montecassino Abbey from Dr. Ralph Azzopardi who says he is "an old colleague of 1897-1901", and who seemed so pleased with the copy of *Chestpiece* sent him. It was a pleasure to read his kind words and discover that *Chestpiece* was one of the few links he had with the Medical School, from which he graduated nearly 69 years ago.

OUR NEW DEAN

This is not intended as a news item but as a means of wishing Profs. A. P. Camillieri (Professor of Obstetrics & Gynaecology) every success in his new appointment as Dean of our Medical School.

NEW READING ROOM

The present M.M.S.A. committee has managed to persuade the University authorities to furnish a new reading room at the Student's Quaters — it soon become possible to entertain people there and thus we even had the pleasure of a visit from the Minister of Health and his wife.

FAMOUS SAYINGS

For some time now, the *Chestpiece* staff have been busy collecting quotes from our Profs' which we feel ought to be perpetuated for posterity. The result is that one wonders what inspired their creators with such perspicacity to exclaim *"Man spends a great deal of his time erect"* (V.G.G.), or to reveal that *"Once you see it you never forget it"* (J.L.P.). One may add the laconic note that *"Medical students have a pathetic faith in the examiner's generosity"* (W.B.). Lastly is a well known aphorism from the Isle of Calypso **"If you master the brachial plexus, you master the whole body."**

book review

LECTURE NOTES ON THE INFECTIOUS DISEASES

John F. Warin., Alastain G. Ironside.
Blackwell Scientific Publications, 1969,
25/- 184 pages.

Each of the 35 chapters in this book can be prescribed for those, like me, who feel and are mentally confused about most infectious diseases, (amongst other things). The lucidity and clarity with which each disease is described cannot but leave a lasting impression on the mind of the reader. The practical manner in which the subjects are subdivided will ensure a full appreciation of its contents.

Viruses are quite rightly described first and at length with about a dozen chapters dedicated to their diseases. The data is very much up-to-date, and although by no means as numerous as in other text-books on infections diseases, clearly comprehensive enough for our needs. Also included is a chapter on chaemotherapy which contains a good summary of the antibiotics in current use.

Indeed this book is very similar to others in the Lecture Note series, that is, the reader is guaranteed a worthwhile buy (25/-), and he will not fail to benefit from a surprisingly effortless read through the book.

J.V.P.

"Magazines are like cultures... they are progressive, conservative radical, puritanical, slow-moving or vigorous. At their most aware they reflect the weaknesses of their societies; at their blindest they are show-cases for the imbecilities of their editors "(from an article by Rajat Neogy, editor of Transition, Uganda, describing the aims and objects of cultural student publications).

primary dysmenorrhoea
- a common clinical problem

anton j. bisazza

DEFINITION

In writing an essay on the condition of primary dysmenorrhoea, one must first and foremost ensure that the reader knows exactly what it is he is reading about. This seemingly superfluous statement is deliberate, and provoked by the apparently infinite variety of definitions attached to this condition. *Primary* dysmenorrhoea is a distinct clinical entity, and is best defined as a pain which is of uterine origin and directly due to menstruation. It has variously been referred to as true, spasmodic, intrinsic, essential and functional dysmenorrhoea, but I feel that the adjective "primary" is best suited to define a condition which has to be distinguished from two other conditions, namely:

1. Secondary dysmenorrhoea, or dysmenorrhoea following pathologic conditions in the reproductive organs.
2. Congestive dysmenorrhoea, or dysmenorrhoea in which the pain arises in tissues outside the uterus.

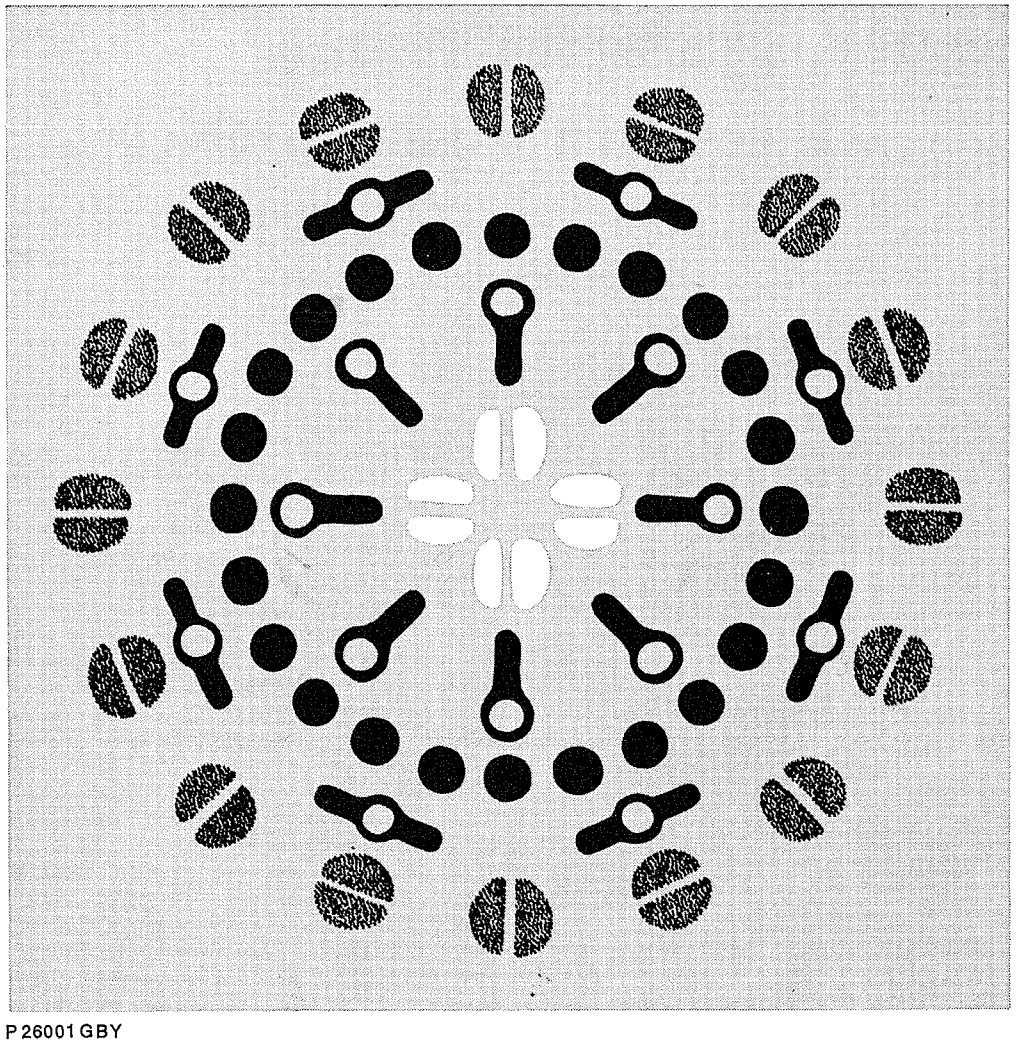
This definition is often ignored in some countries, where primary dysmenorrhoea refers to dymenorrhoea dating from the menarche, as distinct from dysmenorrhoea developing after a phase of painless cycles. However, if one is to adopt this latter classificaton, it is probable that very few cases of primary dysmenorrhoea will be diagnosed; it is my clinical impression that dysmenorrhoea dating from the menarche is very uncommon.

A PROBLEM

Primary dysmenorrhoea is a problem with which the practitioner is often faced, but before rushing to a diagnosis one must realise that there are cases which may present difficulty, and one important condition must be fulfilled, namely that dysmenorrhoea is essentially a first-day pain. Yet, even after obtaining this important piece of clinical evidence, the impression lingers that this is indeed a common condition: so much so that an estimated fifty per cent of all menstruating women experience it and of these the majority are in their late teens or early twenties. The condition is rare after the age of twent-five years, and this probably mainly due to the fact that pregnancy or/and progressive cervical dilatation are nearly always instrumental in bringing about a fair measure of relief. The incidence is no doubt affected by the lowering of the pain threshold premenstrually, as well as during menstruation, especially if one considers the patient's emotional tension before her period is due, with the attendent pain and general inconvenience attached to the latter. It is my clinical impression that the condition under discussion is commoner in the over-anxious type of patient, more so if she happens to be the only daughter of a mother who — on her part — was probably over-anxious and fussy in her own time! One also encounters cases of primary dysmenorrhoea when dealing with the less educated type of patient, particularly where sexual matters and sexual hygiene in general are concerned. Another class of patient affected by the condition is the woman who is unhappy, or who leads a sedentary life and has an unsatisfied sex urge, perhaps when the marriage is a disharmonious one. How all these factors operate exactly is more or less hypothetical, but it is reasonable to suppose that they act — in part at least — by creating a vicious circle, with pelvic-organ congestion as the principal factor involved. Other aetiological factors to be considered in this context would include social status, age, occupation, education, intelligence and personal habits. These all create statistical difficulties; education and intelligence, however, have already been alluded to, and may perhaps increase in importance when one considers that the incidence of primary dysmenorrhoea has decreased of late: but then, standards of sexual education and hygiene have improved considerably within this same period. The inference is obvious.....

THE PAIN — ITS AETIOLOGY

What causes the pain in primary dysmenorrheoa? Well, no one seems to know the right answer to the question, although several



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theories have been forwarded — some attractive, some barely plausible, other quasiposterous. Much has been said and written about the subject, but it seems that for the time being the problem has to remain an academic one. It is heartening to note, however, that so far nobody has dismissed the condition as an "autoimmune disease"..... thank heavens!

It used to be held that the principal mechanical reason for primary dysmenorrhoea was cervical obstruction, notably the presence of pinhole and conical os. This was a pretty widespread belief, but it lost its popularity with the realisation that — in contradistinction to the definite entity under discussion — these were rare conditions: moreover, when present, their association with painful menstruation was both minimal and unimpressive.

Another theory claimed that in primary dysmenorrhoea there is no uterine behavioural abnormality, but that afflicted patients merely suffered from a wrong central nervous interpretation, by the brain, of normal stimuli received from the uterus. This is hardly tenable, first because of no supportive evidence, and secondly because of the quasi-spontaneous cure with advancing age and with pregnancy.

Inevitably, hormones came into the picture, chiefly the realisation that anovular cycles are painless affairs. Thus, it was postulated that exposure of the uterus to progesterone action presupposes the occurrence of dysmenorrhoea, and vice-versa. It is certainly a fact that progesterone induces hypertonicity in the isthmus and upper cervix. (If this physiological phenomenon were somehow exaggerated, then one would understand the cure obtained by permanent cervical dilatation in these patients, as well as the close relationship between a progesterone influence and primary dysmenorrhoea.) This fact forms the basis of a successful, albeit empirical, remedy for the condition, as will be described, and there is probably a lot of truth in the theory. As yet, however, conclusive proof and evidence of its validity are unavailable.

It is generally agreed, particularly in North America and in Britain, that the underlying mechanism is primary dysmenorrhoea is some sort of imbalance in the autonomic nervous control of muscle fibres in the uterus: this autonomic imbalance is followed by sympathetic overactivity, and consequent on the latter there is hypertonus of the circular muscles in the internal os and the isthmus. Which of these three phenomena is a cause and which an effect, is difficult to decide, but there seems to be no doubt that sympathetic overactivity is at the back of the whole complex. It also fits in with the assumption that psychological considerations in these patients are of primary importance, and so far it has not been seriously challenged by any other theory. It is certainly consistent with the type of patient usually presenting with the condition, as well as with the accompanying bowel and bladder tenesmus. We must admit, however, that it still fails to explain the spontaneous cure with child-bearing and old age. Perhaps the patient's mental state is better after a successful pregnancy, or it may be that patients can become "conditioned" psychologically to menstruation with the passage of time. But this remains to be seen.

Other high-flown and far-fetched theories have been forwarded to explain the mechanism of primary dysmenorrhoea, but these are beyond the scope of this essay. One must refer, however, to the recent supposition by British workers that the muscle spasm is due to a lipoid menstrual "toxin", or else to so-called "prostoglandins". This hypothesis appears to have opened up promising fields of research, and this fact may perhaps provide us with fresh information before long.

NOT A DIAGNOSTIC PROBLEM

Most of the clinical features have already been hinted at by now: in point of fact this is a very straight-forward entity, and should not give rise to diagnostic headaches, particularly if the history is taken carefully and symptoms duly appraised. Pain is a dominant feature, and occurs before and/or after the onset of the period to a varying extent; in most cases it rarely last for more than twelve hours. Careful, inquiry will reveal that what the patient describes as "a constant hurt" is in fact a colicky pain, and this mainly hypogastric in its distribution. Not uncommonly, the pain is referred to the anteromedial aspect of the thighs in the distribution of the iliohypogastric and ilioinguinal nerves. It is important to appreciate that in the condition under discussion the pain is never felt below the knee or over the back of the legs — although, naturally, primary dysmenorrhoea and orthopaedic conditions giving rise to such pain are not mutually exclusive. In this context it is also worth mentioning that low back-ache is an uncertain symptom, and too much importance need not be attached to it, especially if the patient herself is not terrible convinced of its occurrence.

Depending on the severity of the condition, there may be associated features such as pallor, sweating, nausea, vomiting, diarrhoea

and rectovesical tenesmus. Pain, however, is the characteristic feature of this condition, as the term used to describe it in fact implies.

There are three special varieties of primary dysmenorrhoea which are worthy of special mention: their importance lies in the fact that the practitioner may be misled into making a mistaken diagnosis if unware of their existence. They are rare, but one may expect to see them at some time or other in a large practice.

The first of these is "membranous dysmenorrhoea", a rare, familial form characterised by the presence of severe colic preceding and accompanying the passage of endometrial tissue which is either stripped off as endometrial cast or passed in large, ill-defined pieces. The condition, which is due to an over-mature corpus luteum inducing an excessive decidual reaction, is not cured by child-bearing, and is very refractory to treatment.

The second special variety is that of dysmenorrhoea associated with the passage of clots. It is rare, unless it forms part of the picture of menorrhagia, in which case it is this latter cause which has to be treated, and not the dysmenorrhoea, which is merely an effect.

The third is that of dysmenorrhoea occurring in association with gross uterine malformation. Thus, the dysmenorrhoea is marked with a septate uterus, and usually moderate in degree with a uterus unicornis or didelphys. The history may provide the clue in some of these cases: for example the pain is often unilateral when it originates in one uterine horn.

TREATMENT

How can we, as doctors, help these unhappy women? Well, if treatment is to be successful the patient's intelligent co-operation is essential, and this fact cannot be over-emphasised. Thus, proper teaching on menstruation, sexual matters and general health must be patiently and assiduously imparted to the woman seeking advice. She will leave the office in a much happier frame of mind if told that her period is not a monthly curse but an outward proof that her "organs" are functioning well; she will also feel more encouraged to learn that instead of giving rise to a "maimed" infant a pregnancy would most probably go a long way towards relieving her symptoms. Patients have different attitudes towards menstruation, depending on their social, educational and behavioural up-bringing, and there is no cut-and-dried form of psychotherapy: the doctor must deal with each case on its own merits.

Patients very often have a bad time of it during period because of prolonged rest in bed at the slightest hint of pain; this is bad, and the doctor should explain the benefits of judicious exercise as well as of the philosophy of "carrying on regardless". If the condition is very bad curtailment of activities, and even rest in bed, are naturally advised, and these measures may be supplemented by the appication of local heat and the administration of aspirin or paracatemol. In some instances, and depending on the type of patient one is dealing with, amphetamine, chlorpromazine and barbiturates may prove beneficial, but antispasmodics and preparations containing ergot have very little place, if any, in the treatment of this condition.

Hormones are a very useful weapon in the treatment of incapacitating primary dysmenorrhoea. They are used with three aims in mind, namely:

1. Improving the vascularity and development of the myometrium.
2. Quieting abnormal uterine contractions.
3. To suppress ovulation, in view of the fact that anovulatory cycles are always painless.

This last consideration is the most important of all three, and the desired goal is attained in full 70 to 90% of patients. This in itself surely warrants a serious therapeutic trial with hormones. One may give 3 mg. of stilboestrol daily from the first to the twenty-first day of the cycle; better still, the oestrogen-progesterone pill is given from the fifth to the twentyfifth day. The latter regime is virtually free of side-effects, and can be adopted with impunity when it is anticipated that an important engagement is liable to be spoilt by a painful period. One can also give the 'pill' when the diagnosis is in doubt, and in this case a daily basal temperature chart is also compiled.

Surgery also has a place in treatment: however, it should never be suggested before the age of eighteen, and even after this age the doctor will consider surgery very carefully if there is a possibility of marriage and child-bearing, since surgery is not without its own hazards. The, of course, it rarely produces brilliant results, although it is justifiable in cases of truly spasmodic, incapacitating pain, as well as in cases where vigorous and appropriate medical treatment has failed.

The commonest from of surgical treatment is that of cervical dilatation; it effects a cure in 60% of cases, but may later be followed by recurrent abortions because of the hypotonicity it induces in the internal os. The

procedure can be coupled with injection of the Lee-Frankenhauser plexus, or else this can be done as the sole therapeutic measure. In either case, results are uncertain. It is maintained by some, however, that when injection of the cervical plexus has given temporary relief after all other measures have failed, sympathectomy may be indicated. Results are difficult to assess because of the few cases in any one man's experience and the variability of the criteria of true primary dysmenorrhoea in published reports.

Presacral neurectomy, another suggested form of treatment, aims at eliminating motor impulses, increasing the uterine vascularity and interrupting sensory pathways; whether it does all this is doubtful. The operation is reserved for the badly neurotic patient, and this may perhaps account for the poor success-rate attending the procedure, which is certainly not to be undertaken lightly.

One last word must be said about hysterectomy; this is often mentioned as an extreme form of treatment in very severe and refactory cases. It can be categorically stated, however, that there is no real unjustifiable indication for removing something which is giving rise to pain not because of any organic lesion, but because pain is simply one of the manifestations of its normal physiological function. Indeed, pain is part of a woman's existence is so far as we can explain it away on a physiological and not a pathological basis. We can modify this physiological process by the scientific administration of hormones, and we can educate the patient into being better able to cope with an admittedly troublesome condition. Perhaps the treatment of primary dysmenorrhoea can be made easier for both doctor and patient if both of them could recognise the significance and inevitability of moderate to severe pain as a natural accompaniment of menstruation. If this can be achieved, it is likely that our patients will come to adopt a healthier, braver attitude towards their ailment — if this is the right word to use in this context. We, as doctors, may not consider it the right word to use, but the severely incapacitated woman most certainly does, and it is for this reason that she seeks her doctor's advice. It is therefore up to us to try and make the "dreaded day" better for our patients, and primary dysmenorrhoea is a supreme instance in the practice of medicine which calls for a careful and intelligent combination of some drugs, plenty of patience, and an infinite capacity for genuine sympathy.

REFERENCES

Behrman S. J.	Am. J. Obst. & Gyn. 1961 (81.3)
Behrman & Gosling	Fundamentals of Gy. (2nd. Edition)
Davis A. A.	Lancet 1963 (1)
Greenhill J. P.	Surgical Gyn. (3rd. Edition)
James J. W. B.	Br. Obs. & Gy. Practice (3rd. Edition)
Jeffcote T. N. A.	Br. Obst. & Gy. Practice (3rd. Edition)
Mann E.	Progress in Gyn (Vol. 4, 1963)

a brief history of medical record - keeping

salvu vella

The records of Medical observation, facts and developments, form the basic structure upon which the History of Medicine has been written. Some form of such records date back to early antiquity. Polythrone Murals have been found in Stone Age caverns, and silhouettes depicting trephining of the skull and the amputation of fingers appear on the walls of Paleolithic caverns in Spain. These date back about 2500 B.C.

These early records were primitive in form and essentially descriptive, but they have put on record the Medical and Surgical achievements for generations to follow. Though not strictly records in the modern sense of the word, they are mute evidence that the authors of those days kept some form of records of the treatment that their patients used to receive.

EGYPTIAN PERIOD

According to Castiglioni and the noted Egyptologist James Henry Breasted, the first real physician on record in Egypt was Imhotep, who lived in the Pyramid Age (about 3000-2500 B.C.). He was Grand Vizer, Chief Architect and Royal Medical Advisor to a Pharaoh of the twenty-ninth century before Christ. He was worshiped as a medical demigod (as was Aesculapius at a later period in Greece) and regarded as a patron god of medicine as his fame spread abroad.

The authorship of the famous Edwin Smith Papyrus is sometimes attributed to Imhotep. This papyrus is one of the most valuable ancient medival document that dates back to 1600 B.C. and is believed to be a copy of an earlier original, but unfortunatly neither the author nor the copyist is definitly known. Edwin Smith (one of the earliest students of the Egyptian Script) recognised it as a medical treatise. It deals with forty eight cases of Clinical Surgery, in a roll over fifteen feet long by about fourteen inches wide, and made up of twelve sheets written on both sides. It is at present the property of the New York Academy of Medicine. Another earlier medical treatise written somewhat later (about 1550 B.C.) is also inscribed on a sheet of papyrius sixty five feet long and about twelve inches wide. It records careful observations on a number of diseases and describes several remedies.

The papyrus known as the Ebers papyrus belongs to a period antedating the exodus of the Israelites from Egypt. It was discovered near the legs of a mummy in a necropolis near Thebes in 1872 and up to the Second World War was the valued possession of the University of Lepzeig. Both this and the Edwin Smith papyrus are considered to be original writings but in fact form a compilation of medical material belonging to a much earlier period.

GREEK PERIOD

Greek medicine has ben primarily influenced by contributors from older civilisations such as those from Egypt, Babylon and Asyria. Apart from the influence which Greece had on Surgical thought the major credit to Greece lies in the introduction of a scientific approach to the healing art.

Medicine was cultivated by the Asclapiadae, an order of Greek physicians that traced its origin to the Greek god of medicine, Aesculapius. They built temples for the care of the sick (known as Aesculapia), and these were in existence as early as 1134 B.C., at Epidaurus, a seaport west of Athens. The names of patients together with their Medical Histories and short comments were found inscribed on the columns in the ruins of these templs. This type of record approaches very closely in form and character, the medical records as kept today. Such documentation both in Greece and Egypt was accessible only to persons authorised to examine and study them.

The year 460 B.C. marks the birth of Hippocrates, the father of medicine. Hippocrates was thought by his countrymen to be lineally descended from Aesculapius. It is said he drew the elements of his medical knowledge from the collection of reports and cases collected in the Aesculapium at Cos his birth place. It is interesting to note that these reports (although now over 2000 years old) are described in such detail by Hippocrates. Whether or not they were intended to be records for posterity

is not definitly established, but many of the observations and data that are set out are as valid today as they were then.

GRECO-NORMAN PERIOD

During the time of Marcus Aurelius, about 600 years after the Hippocratic era, Galen of Pergamon appeared in Rome. He acquired fame by curing the Emperor. Galen was born in A.D. 130 probably not in the city itself but on a estate in the suburbs. He belonged to distinguished family; not only his father but also his grandfather were educated people. His father Nicon though an architect, was also a mathematician and artisan, besides a wealthy land owner. Galen had the advantage of receiving his education in the great city.

Galen wrote innumerable manuscripts, being the first to show that the arteries contain blood not air. His description of biliary colic is as precise as one would expect today.

During this period, the Romans issued the "Romana Acta Diurna" to be posted in prominent places for reading. In this publication the important events of the time were given it included also items of medical character.

BYZANTINE PERIOD

The Byzantine period lasted over one thousand years. With the decline of the Greek and Roman civilisations very little progress was made in the recording and preserving of medical records. At that time work of this kind was carried out by conscientious monks who copied by hand the writings of Hippocrates, Celsus, Galen and many of the earlier physicians, thus also presrving the art of medicine.

MOHAMMEDIAN PERIOD

With the rise of Islam the whole Near East was dominated by the Arab conquerer. It was during this period that Rhazez practiced in a hospital in Persia and Bagdad. He wrote large volumes dealing with medical subjects. Another noted physician by the name of Avicenna was well known during this century. He lived in the Tenth Century when Arabic Culture was at its height. Avicenna based his writings on the work of Hippocrates and these were combined with the information gathered in his journies as an itenerant doctor. His greatest document, "The Canon of Medicine", is an original arabic manuscript written in Isfahan in 1632. Later, in the 16th century, translated into latin, it became a favourite textbook in all Medical Schools in Europe. It is now the possession of the Welcome Library.

During the Byzantine, Jewish, Mohammedan and early Mediaevial periods, the quality of medicine declined together with the deterioration in the moral and ethical status of the people and as far as it is known only a few medical records were kept at that time.

MEDIAEVAL PERIOD

The only hospital still in existence whose records and manuscripts have been preserved since 1137 is St Bartholomew's Hospital in London, founded by Rahere.

With the renaissance and the reign of Henry VIII (1509-1547), conditions in St Bartholomew's were improved, and rules were drawn concerning the management and running of the hospital. Even then the importance of keeping medical records was fully appreciated. St Bartholomew's possessed the first Medical Records Department; in 1667 (one century later) it also set the lead by creating a medical library.

Besides St Bartholomew's there were about 500 hospitals and charitable institutions founded in England, though little or nothing is known about their record keeping.

During the period 1500-1640 Andreas Vesalius (1514-1564) a Belgian appears, who besides his tremendous contributions to anatomy is rembered for the records he kept of his findings. Later, Dr Nicholas Tulip (1622) of Amsterdam recorded hundreds of medical cases which were of great scientific interest. In those days it became the practise to keep an "Anatomy Book" in which dissections were carefully recorded for later reference.

SEVENTEENTH CENTURY

At about this time virtually all hospitals in England were now keeping and recording medical histories. It was also realised that vital statistics played an important role in medical records, and in 1622 Captain John Grant published the first study of vital statistics. This publication was based on the "Bills of Mortality", i.e. burials, marriages and baptisms. In it Grant observed certain facts that are still true today; he showed that urban mortality rates were higher than rural morality, and that although the male birth rate exceeded the female rate, the sex population was approximately equal because of an higher mortality rate among boys.

EIGHTEENTH CENTURY

One of the leaders in the move to establish the first 'incorporated' hospital in the United States was Benjamin Franklin, and the first such hospital is today known as the Pennsylvania Hospital, founded in 1752. Records of their very first admissions are still preserved which show the name, address, diagnosis, date of admission and discharge of all their patients in the first fifty years. Later on, more detailed

records some even with pen-and-ink sketches were kept; until in 1803 the hospital began to keep proper and fully detailed case histories, and has a file unbroked to the present day. In 1873 the first Patients' index was introduced and suitable index cards introduced in 1906.

In 1771 the New York Hospital opened and started its first register of patients in 1793. The majority of the histories date from 1808 and are of the same pattern as the ones used nowadays. Attepts at indexing were fruitless until 1914, when an official nomenclature was adopted.

NINETEENTH CENTURY

On the 3rd September 1821, one of the famous general hospitals in the United States was founded. The hospital, known as the "Massachusetts General Hospital of Boston", has the distinction of having a complete file of clinical records, with all cases appropriately catalogued and dating from the day it was opened. In 1893 a card catalogue was compiled for the patients admitted to the hospital from the year 1871. During the year 1897, a Medical Record Officer was employed with the responsability of cataloguing clinical records. This seems to be the first hospital in the United States to have had a Medical Record Officer. She later became the first President of the Association of Medical Records Officers of North America. During the early years their histories were written in ink on folio (about eighteen inches long by twelve inches wide). They were bound in volumes two and half inches thick, and binding boards were covered in leather with the titles set in gold lettering, each volume weighing about ten pounds.

TWENTIETH CENTURY

It was not until the beginning of this century, that medical records were given serious consideration by nearly all hospitals in the World.

In 1902, a convention of the American Hospitals Association was held, and Medical records were discussed for the first time. Some problems that were raised at that Convention were: the lack of uniformity in methods; no particular person in charge of the records, as well as the indifference on the part of the older doctors which was the main cause of the failure to obtain good records. Since the convention of the American Hospital association in 1902, three other International Congress on Medical Record-Keeping and allied subjects were held.

The ever increasing number of participants attending subsequent Congresses are a testimony to the great importance that is attached to the standardization and proper preservation of medical records. Nowadays, the value of recording clinical data is more generally accepted by doctors.

THE MEDICAL RECORD OFFICE

To-day cooperation between the Medical library and the Medical Records Office is essential because the Medical library can help materially in the proper organisation and cataloguing of medical records. Research into medical records necessitate a subject study and a review of medical lierature. A Medical Records Officer working in collaboration with the Medical librarian having free access to a good Medical library, provides encouraging support to medical students, medical staff and research workers in a teaching hospital. The Medical Records Officer, also helps in extracting data and information from case records, and in furnishing details regarding the literature on the relevant topics. Looking back from a Diagnosis or Operation index, the Medical Records Officer would be able to supply an amount of detail in proportion to the completeness or otherwise of the case histories.

The medical records department constitutes an important section in the functioning of the modern hospital. Good and properly kept medical records are the concrete sign of attainment of a teaching hospital over the years, and reflect the constant efforts of its medical staff in striving for continuous improvement in furthering the science of Medicine.

REFERENCES

Huffman, E.K., *Manual of Medical Records*, Physician Record Company, Chicago, 1955.

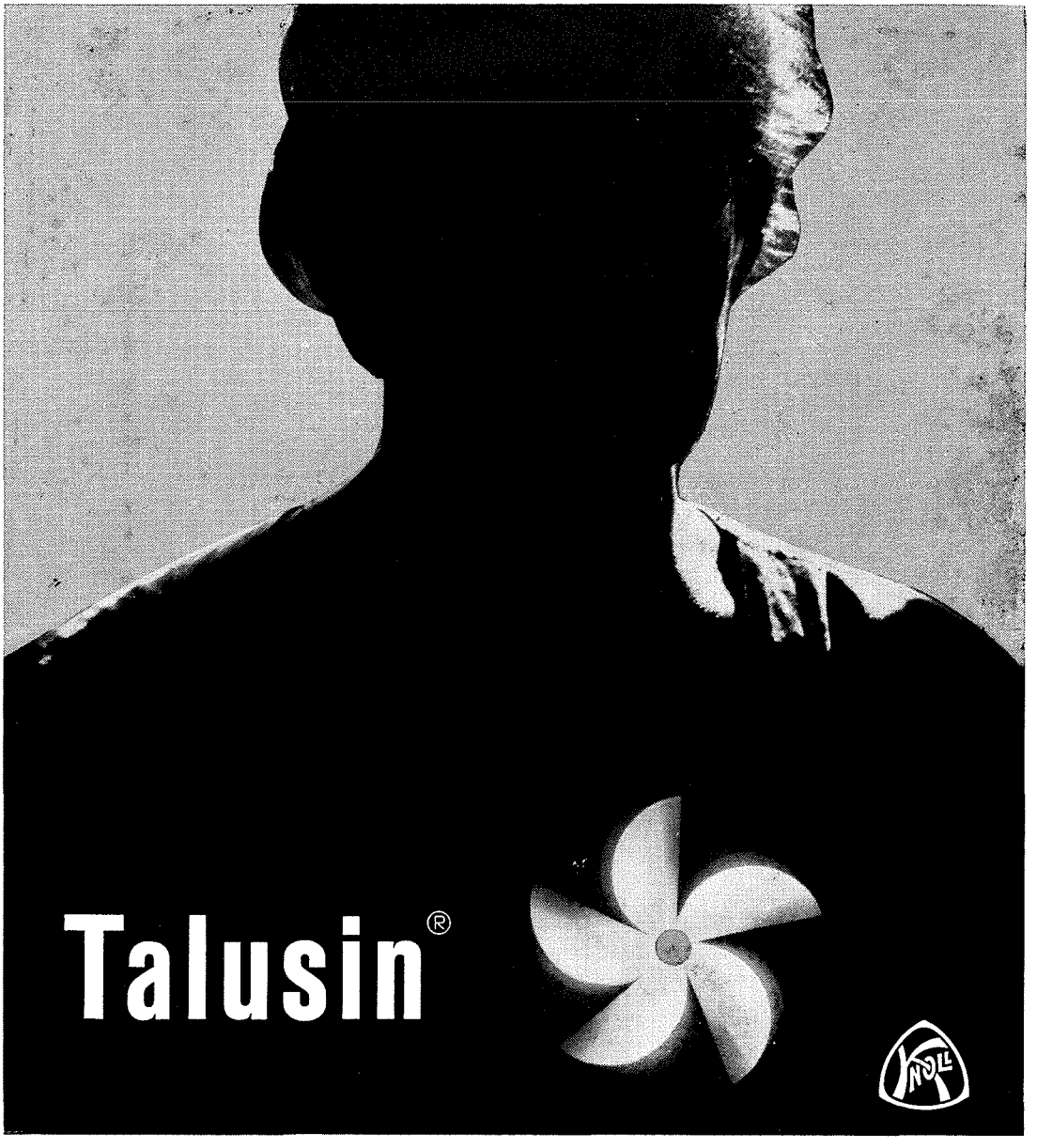
Sarton, G. *Galen of Pergamon*, University of Kensas Press, Louisana, Kansas, 1954.

Clay, R.M. *The Mediaeval Hospitals of England*, Frank Cass and Co. Ltd., 1966.

Owen, J.K. *Modern Concepts of Hospital Administration*, W.B. Saunders Co. Philadelphia, 1962. Medical Review, Vol. 1 no 10, 1969.

Stone, Capt. J.E. *Hospital Organisation and Management* 4th Ed., Faber and Faber Ltd., 1952.

Proceedings of the Third International Congress on Medical Records. E & S Livingstone Ltd., London 1960.



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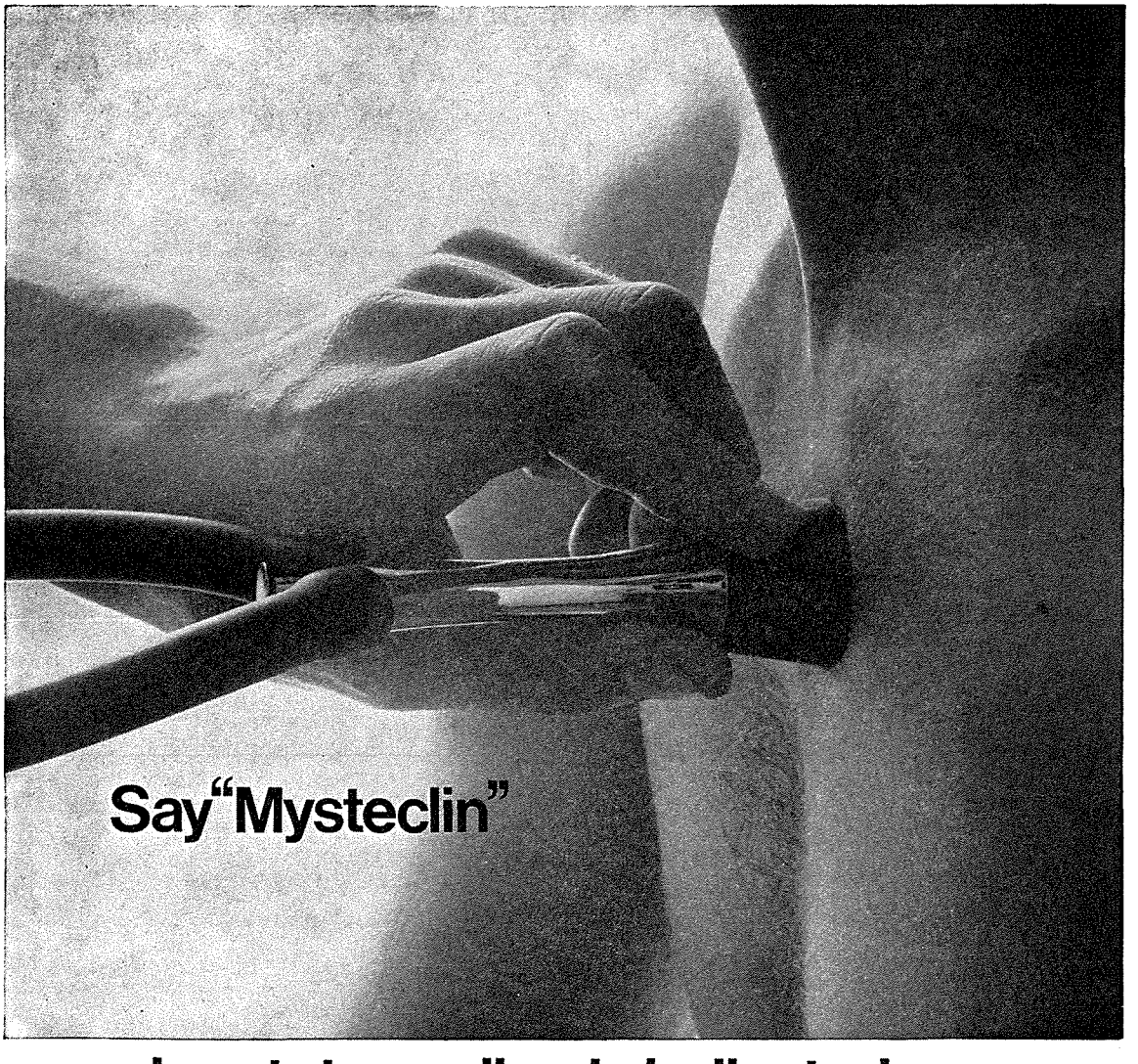

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