his loss of time and waste of hospital time could have been avoided. Also the expenses of the numerous tribunals would have been lessened.

The second example concerns a man whose carcinoma of the colon I removed several years ago. About two years before death, I removed the prostate. About two months before death he was readmitted with urinary infection. Cystoscopy, after dilating a urethral stricture, showed that the bladder was so inflamed that an accurate diagnosis was not possible. Urine was sent for examination and after treatment he was discharged to await the report. Later he was admitted to an outlying hospital and rapidly transferred to the main hospital. The house physician's notes read, "The patient is moribund and unable to give a history." What now seems to be the routine investigation was set in motion, and this included chest x-ray, blood Wassermann, gonococcal complement fixation test, blood cholesterol, complete blood chemistry, and some others I cannot remember. By the time these reports had been collected and typed the man was safely interred, and death was certified as secondary carcinoma of the lungs. The radiologists' opinion was that the lung changes were those of miliary tuberculosis. By the time I had learned of his death the result of the urine examination was available and this showed heavy growth of tubercle bacilli.

One might ask what purpose could be served by these extensive, expensive, and time-wasting investigations in a dying man. A few hours' delay for a search of the records would have made no difference to the ultimate result.

It would seem that the old-fashioned teaching which depends on the senses we have been given—hearing, speech, vision, smell, tactile appreciation, and memory—has been abandoned and a diagnosis cannot be made without routine investigation of every fluid in the body, supplemented by x-rays of various organs. From this sheaf of typewriting it is hoped that some clue may be given which may fit in with the patient's symptoms—if he has been questioned about them.—I am, etc.,

Plymouth, Devon.

EDRIC WILSON.

SIR,—The poignant case cited by Mr. A. Dickson Wright (15 February, p. 440) seems to typify a trend in contemporary therapy in which the enthusiasm of some physicians for modern scientific methods blurs their imaginative faculty in respect of the patient's condition.

One would like to suggest that an "advance declaration," copies of which could be deposited with one's family doctor, solicitor, and nearest relative, might be a reasonable procedure so that in the event of terminal illness or irreparable damage to brain or other organs, where life can only be sustained by artificial means, the physician in charge would have some ethical guidance as to whether to resuscitate, investigate, or *requiescat in pace*.

Such a declaration would, of course, at present be non-statutory, but the Euthanasia Society of London hopes to incorporate a form of "advance declaration" in a Bill for the legalization of voluntary euthanasia which the Society hopes will be debated in Parliament in the near future. In this way a stricken patient would at least have the expectation of dying with dignity.—I am, etc.,

MAURICE MILLARD.

Member of Executive Committee,
Euthanasia Society.

Leicester.

Draining Loop Colostomy

SIR,—The traditional loop colostomy when used in the management of acute large bowel obstruction can cause difficulties in nursing care particularly with regard to dressings. Paul's tube provides a closed drainage system, though it can become blocked or dislocated. Other ways of managing such a colostomy

ence of the plastic ring are removed. The glass rod (the ends of which are covered with rubber tube) is placed across the ring and located in the slots, having first been passed through the mesentery of the colon. The colostomy plate is then stuck to the skin and the bag placed in position. This arrangement is neat and keeps the patient comfortable, provided that there is

have been described, and recently, Mr. W. M. Keynes (18 January, p. 187) discussed the use of colo-cutaneous suturing. However, I have found that adequate control of faecal material may be achieved by modifying one of the disposable colostomy/ileostomy appliances now available.

The opening in the plate is cut to the correct size and two small segments of the circumfer-

satisfactory adhesion between the skin and colostomy backplate.

I have found that this improvised appliance works well and frequent dressings are avoided.—I am, etc.,

W. R. G. THOMAS.

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Maelor General Hospital,
Wrexham, Wales.

Is Quinidine Outdated?

SIR,—There appears to be some confusion regarding the conclusions my colleagues and I came to concerning the use of quinidine. Unfortunately the paper we published¹ in which we gave our reasons for preferring direct-current shock to quinidine for reverting paroxysms of arrhythmia to sinus rhythm is not quoted either in your leading article (8 February, p. 331) or by Dr. C. P. Petch (22 February, p. 507) who takes issue with us. The paper to which they both refer, by Dr. J. P. H. Davies and myself,² is not concerned with quinidine as a means of reverting arrhythmia to sinus rhythm, but we did undertake a random trial of that drug as a means of maintaining sinus rhythm. It was our unpleasant experience from this trial which prompted us to publish the paper referred to above entitled "Quinidine-induced Syncope." We made it clear that we do not consider quinidine is as yet completely outdated and our conclusions were: "Unfortunately sinus rhythm, whether induced electrically or by quinidine, may not be permanent, and it must be admitted that there are a few patients who are so acutely aware of their paroxysms of arrhythmia that not only their daily life but also their sleep is seriously interfered with; they can obtain respite only from continuous oral quinidine. In our view there is no indication to treat any paroxysm of arrhythmia with quinidine, and direct-current shock is strongly to be preferred, but there is a small place still for its use as a preventive of paroxysms until a safer drug is discovered."

"We would emphasize that precautions regarding quinidine therapy . . . may all be carried out carefully and yet the patient may suddenly and unexpectedly die."—I am, etc.,

S. ORAM.

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London S.E.5.

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Pulmonary Oedema following Immersion in Sea-water

SIR,—In his admirable article on drowning (7 September, p. 597) Surgeon Rear-Admiral Stanley Miles states that pulmonary oedema following inhalation of water may demand treatment by positive pressure oxygen ventilation. We describe the case of a patient, recently treated by us, in whom this proved effective.

A woman aged 52 fell overboard into sea-water while drunk. She was rescued, expired air resuscitation was commenced, and she was taken to the local hospital and seen by one of us (M.G.H.). She was extremely cyanosed and there was no spontaneous respiration and no palpable pulse. No heart sounds could be heard. Endotracheal intubation was performed (9 mm. cuffed tube) and the lungs inflated with 100% oxygen. Hydrocortisone 100 mg. and frusemide 20 mg. were administered intravenously and cardiac compression continued.

The response was encouraging, and after 90 minutes she was breathing without assistance and showing signs of returning consciousness. The endotracheal tube was no longer tolerated and was removed. After a further 30 minutes, however (2½ hours after immersion), she suddenly became extremely cyanosed with signs of gross pulmonary oedema. She was transferred to the Royal Devon and Exeter Hospital.

On arrival at the hospital she was barely conscious, and had extreme central cyanosis and severe pulmonary oedema. She was hypothermic, her heart was fibrillating at a rate of 80 per minute, and her blood pressure could not be measured. Endotracheal intubation was again performed, the air passages cleared by suction, and oxygen was administered. She was given ampicillin, hydrocortisone, frusemide, and aminophylline intravenously and morphine intramuscularly, and transferred to the intensive care unit, where intermittent positive pressure ventilation was commenced. A Cape respirator was used (stroke volume 750 ml., pressure 20 mm. Hg., rate 20/minute). Examination of the blood at this time showed haemoglobin concentration (Hb 120%, P.C.V. 55, W.B.C. 4,500, Na 152, K 4.0, Cl 110, urea 38). It was necessary to continue intermittent positive pressure ventilation for 54 hours, since, when on two occasions it was discontinued, the patient rapidly became cyanosed. Sedation was provided by the administration of morphine or phenoperidine. An endotracheal tube (nasal, Portex 9 mm.) was left for a further 112 hours to facilitate bronchial suction and efficient oxygen therapy. During this time auscultation revealed a steady decrease in pulmonary oedema, which was confirmed by radiological examination.

After eight days her condition allowed her transfer to the general medical ward. Her continued progress was interrupted by repeated melaena stool as a result of bleeding from a large hiatus hernia which required blood transfusion. She was finally discharged six weeks after her admission.

We are grateful to Dr. A. J. Daly for permission to report this case.

—We are, etc.,

W. BOND-TAYLOR.
M. G. HALFORD.
P. JENNINGS.
K. J. POWELL.
R. WHITTLESEY.

Royal Devon and Exeter Hospital,
Exeter, Devon.

Jaundice and Methyldopa

SIR,—Jaundice has been reported as a rare complication of methyldopa therapy, and abnormalities in liver function tests are occasionally found in patients taking the drug. Only three such cases have been reported^{1,2} and one case with abnormal liver function tests but without frank jaundice has also been reported.³

A 74-year-old man was first seen in 1961, when he was found to be hypertensive. He was a publican and took large amounts of alcohol. His liver function tests were within normal limits at that time. They were repeated two years later and were again normal. His blood pressure was controlled on reserpine and hydroflumethiazide.

He was not seen again until his admission to Hounslow Hospital on 29 October 1968. At the end of August 1968, for the first time, methyldopa 250 mg. per day had been prescribed. He was taking no other drugs with the methyldopa. Prior to that he was taking guanethidine. In mid-October 1968 he noticed that he was jaundiced and that his urine was dark. His stools were of normal colour. He continued to take the methyldopa until he was

admitted to hospital. Meanwhile the jaundice was becoming progressively deeper and his urine darker. He had had no symptoms prior to the onset of the jaundice; he was apyrexial and he remained symptom free during the whole period of his jaundice. He had not been in contact with any known case of hepatitis and had not received any transfusions or injections in the past.

On examination he was deeply jaundiced. His liver and spleen were not palpable and there was no abdominal tenderness. Blood pressure was 190/110. Haemoglobin 117%, W.B.C. 3,600/cu. mm. (differential count normal), E.S.R. less than 1 mm./hr., serum bilirubin 17.6 mg./100 ml., alkaline phosphatase 16.6 King-Armstrong units/100 ml., thymol turbidity 0.5 units; total protein 6.3 mg./100 ml.—albumin 3.8 mg./100 ml., globulin 2.5 mg./100 ml. Unfortunately the alanine transaminase was not estimated at that time. His urine showed increased urobilinogen and bilirubin was present.

The methyldopa was discontinued immediately and the serum bilirubin level dropped to 8.9 mg./100 ml. in seven days, to 5.1 mg./100 ml. in 13 days, and 4.5 mg./100 ml. in 16 days. The alkaline phosphatase was 9 King-Armstrong units/100 ml. in 13 days, and aspartate transaminase level at that time was 71 units/ml. The alanine transaminase one month after the onset of the jaundice was 79 units. Liver function tests returned to normal on 2 December 1968—that is, about four and a half weeks after discontinuance of the methyldopa.

In the absence of any constitutional disturbance or contact with known cases of hepatitis, injections, or blood transfusions and the rapid improvement on discontinuing the drug, no other explanation for his jaundice could be found other than a reaction to methyldopa. The fact that the patient developed jaundice on a very small dose of methyldopa (25 mg. daily), while other patients may take up to 3 g. daily for long periods and never develop jaundice, suggests a hypersensitivity reaction. One could suggest that, being a heavy drinker in the past, alcohol might have caused liver damage and this predisposed to the onset of the hepatocellular jaundice. However, his liver function tests previously were within normal limits.

We should like to thank Mr. S. A. Taylor, F.P.S., and Dr. D. C. P. Brown, of Merck Sharp & Dohme Ltd., for their kind assistance in preparing this report.

—We are, etc.,

R. WYBURN-MASON.
C. ANASTASSIADES.

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Hounslow, Middlesex.

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Haemophilus influenzae Type B Septicaemia

SIR,—We would like to report another case to emphasize the point made by Dr. R. J. Farrand (18 January, p. 150) that this condition may not be as rare as previously believed.

A 6-month-old girl was admitted in February 1969 under the joint care of Dr. E. M. Belton and Mr. A. Graham Apley, with a history of fretfulness for two days and reluctance to

move the left arm for one day. Attempts to move the arm resulted in screaming, but there were no other symptoms. The mother had been treated recently for a septic finger. On admission the child was pyrexial (101° F.; 38.4° C.), and the left arm was hot and swollen with acute tenderness above the elbow. The haemoglobin was 10.1 g./100 ml., E.S.R. 47 mm./hr., and white blood count 24,000/cu. mm. (45% neutrophils). X-ray examination showed no bony abnormality but an irregular swelling of the subcutaneous soft tissue. A diagnosis of osteomyelitis of the humerus was made, and blood cultures were taken which three days later yielded a growth of *H. influenzae* type b sensitive to ampicillin and erythromycin.

Treatment was started with intramuscular ampicillin and cloxacillin, but the latter was replaced by erythromycin when the haemophilus was isolated. By this time the condition was responding rapidly without the bone needing to be drilled, and the arm was being freely moved. Ten days after admission x-ray examination showed early periosteal new bone formation over the lower humerus. The child has now been discharged home. —We are, etc.,

R. J. EVANS.
A. J. FRANKLIN.

St. Peter's Hospital,
Chertsey, Surrey.

Through-knee Amputations

SIR,—May I comment very briefly on Mr. P. F. Early's letter (18 January, p. 184)? Given initiative and modern technology, a prefabricated domed end containing a hydro-elastic pad could be supplied for all through-knee stump sockets. It should occupy no more than 1 in. (2.5 cm.) below the stump, and give complete padded end-bearing.

With respect to Mr. Early, his other measurements are not relevant to through-knee amputation, where the axis of the joint must lie above the condyles and the mechanism must be laterally placed. This is not difficult to arrange with modern technology; all that is needed is initiative and prefabrication. Adequate module prefabrication would cut down the time of supply of artificial limbs very significantly.—I am, etc.,

Derby.

R. LUNT.

Herniorrhaphy

SIR,—Mr. O. K. Gibbon (18 January, p. 187) writes that the results of a widespread return to basic principles in the teaching and practice of inguinal hernia repair would show that there is no need for the introduction of yet more new operations, as he condemns the operation recommended by Mr. L. F. Tinckler (28 December, p. 832). It has been the return to basic principles, however, which has allowed more and more surgeons to take advantage of the preperitoneal approach in curing groin hernias.

The preperitoneal muscle-splitting approach has all the requisites for success listed by Mr. Gibbon, and Mr. Tinckler is right (in my opinion at least) in suggesting that the insertion of a prosthesis in the preperitoneal plane is a logical solution for some inguinal hernias. The approach is no innovation, having been used as long ago as 1943 for femoral hernias by the late Mr. Rupert Vaughan Hudson, of the Middlesex Hospital, London.¹ We followed 175 femoral hernias repaired with the Vaughan Hudson tech-