The abnormal lipid pattern is the first change to occur as hypothyroidism develops and the last to disappear on treatment, or remains the sole abnormal finding on inadequate therapy as shown in the data presented by Dr. Evered and his colleagues. Although the lipid alteration is unexplained, it cannot therefore be dismissed with the words, "the hepatic mechanisms for cholesterol excretion and catabolism are unlikely to be prescient of a future hormone deficiency."[3]

The conclusions regarding T-4 dosage, reached as a result of the excellent work by Dr. Evered and his colleagues, are in conflict with mine, based on simpler tests done on a great number of patients. Dr. Evered and his colleagues will warn that over-treated hypothyroid patients will suffer from fragile bones and I will continue to warn that under-treated hypothyroid patients may die of coronary artery disease.—I am, etc.,

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1 Fowler, P. B. S., and Swale, J., *Lancet*, 1967, 1, 1077.
2 Fowler, P. B. S., Swale, J., and Andrews, H., *Lancet*, 1970, 2, 488.
3 Lewis, B., and Krikler, D. M., *Lancet*, 1971, 1, 1295.

Pancytopenia after Administration of Distalgesic

SIR,—Further to the report by Dr. S. B. Datta of a case of fatal pancytopenia after administration of Fortagesic (21 July, p. 173), I wish to report a case of a non-fatal pancytopenia following the use of paracetamol in combination with dextropropoxyphene (Distalgesic).

A 74-year-old woman presented to her own doctor with herpes zoster in the distribution of the 10th left thoracic nerve and Distalgesic was prescribed for the associated pain. Approximately nine days later, after taking 54 Distalgesic tablets (each containing 32·5 mg of dextropropoxyphene hydrochloride and 325 mg of paracetamol), the patient noted an extensive purpuric rash on both legs. This was diagnosed as "phlebitis" and Distalgesic was stopped and oxyphenbutazone was then prescribed. However, this treatment was stopped after a few days when the purpura had progressed and widespread ecchymoses had appeared. At this stage the patient was very pale and was admitted to hospital, where she was found to have a marked pancytopenia with a haemoglobin of 7·4 g/100 ml, white cell count 2,200/mm^3, and platelet count less than 10,000/mm^3. Examination of the bone marrow showed marked depression of all elements. Investigations to exclude disseminated lupus erythematosus and paroxysmal nocturnal haemoglobinuria were negative. The patient was transfused with platelets and blood and was started on steroids. Her blood picture rapidly improved and 12 days after admission her haemoglobin and white cell count were normal and the platelet count was increasing.

Presumably this patient's pancytopenia was secondary to the paracetamol contained in Distalgesic, as dextropropoxyphene is not known to cause blood disorders. Thrombocytopenia has been reported by Heading[1] in 1968 following a five-month course of Distalgesic, but I am not aware of any previously reported cases of pancytopenia following the use of this very commonly prescribed paracetamol-containing preparation.—I am, etc.,

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1 Heading, R. C., *British Medical Journal*, 1968, 3, 743.

Thalassaemia in the British

SIR,—Dr. H. H. M. Knox-Macaulay, Professor D. J. Weatherall, and their colleagues are to be congratulated on their report of thalassaemia in the *B.M.J.* (21 July, p. 150). They rightly emphasize that these conditions must be considered in all cases of refractory anaemia, even in "thoroughbred" British patients, the relative ease of diagnosis (and the importance of family studies), and the problem of pregnancy in such cases.

Professor Weatherall's interest in the thalassaemia syndromes, however, is well known and it might be argued that this has caused undue referral of many cases to his unit and that the report thus overstates the problem. During the last five years I have investigated four families in the East Riding of Yorkshire and one family in the Channel Islands. Previously I had seen four families in Birmingham. This experience should confirm that these conditions are relatively uncommon but that when refractory anaemia is under consideration pure British ancestry does not exclude this diagnosis.

Apart from the problems of pregnancy, concomitant iron deficiency, and the assessment of transplacental haemorrhage the commonest difficulty I have experienced has been convincing colleagues of the diagnosis. The authority of this paper should serve to draw attention to the existence of thalassaemia in the British Isles, the simple diagnostic measures necessary, and the importance of correct management, particularly relating to iron therapy and pregnancy, in order to avoid the unfortunate physical and psychological difficulties described, which I also have encountered.—I am, etc.,

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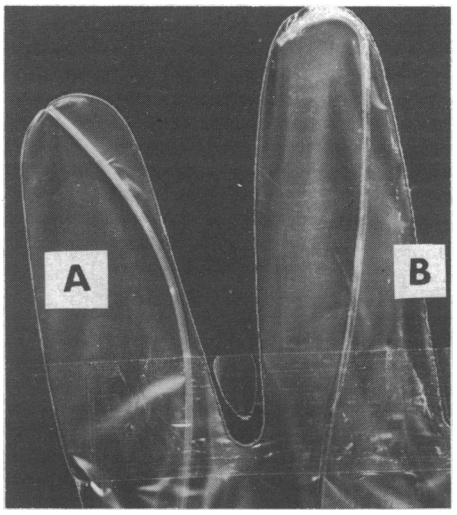
Hazards of Central Venous Catheterization

SIR,—Dr. C. J. Rudge and others (7 July, p. 23) draw attention to vessel wall puncture as a serious complication of central venous catheterization.

In three of the four cases described by the authors an Intracath, made from Clearex plastic, a polyvinyl chloride (PVC) derivative was used. I have also produced a mediastinal haematoma using such a catheter, and it is my experience that they are sometimes too rigid for easy negotiation of the subclavian-innominate junction. These difficulties have been largely relieved by using a softer PVC catheter (Abbott Drum-Cartridge Catheter) in which the stilette is absent from the terminal 2·5 cm. This enables a rounded



Two intravenous catheters (with stilettes in situ) were passed into the fingers of a disposable clinical examining glove to maximum pressure (i.e., until the catheter began to buckle). The Clearex catheter (A) is tenting the plastic of the glove whereas the PVC catheter (B) has accommodated itself to the curve and presents a rounded leading edge.

leading edge to form at any point of obstruction (see fig.), making vessel wall damage less likely and facilitating the negotiation of sharp bends. Further central venous damage may be inflicted once the catheter is in situ if its rigidity is sufficient to keep the tip in contact with the wall of a vein or atrium constantly exposed to normal cardio-respiratory motion. A more flexible catheter is less likely to do harm.

As it may be possible to aspirate blood from the catheter even though its tip is no longer in the vessel, it is especially important to check the catheter position when more than just saline is to be administered through it. Many modern catheters are radio-opaque, but it may be necessary to inject contrast medium to be quite sure. The potential hazard of a mediastinal infusion of a parenteral diet adequately justifies such safeguards.—I am, etc.,

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New Eye Hazard

SIR,—A new eye hazard has been added to the motor industry. This is a sparking plug with a glass body which is inserted into the cylinder in order to adjust the colour of the explosion flame for engine timing. The mechanic watches directly over the plug while carrying out the necessary adjustments.

A patient of mine was doing this when the glass came away from the screw base and, naturally, hit him directly in the eye. Fortunately the eye was not lost, but I think the patient was very lucky.—I am, etc.,

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