

tors in some unique, recognizable, and durable way; and young people at school, college, or university should be approached to obtain their consent to the use of their organs after death.

Good results from transplantation depend on good tissue matching, and this can be achieved only if there is an adequate supply of donor organs and some registry for potential recipients and donors. Many family doctors would like to be able to tell their patients whom to contact if they wish to donate their organs after their death. This may be a task that could be tackled by one or more voluntary organizations, but it is likely to be expensive, and experience in Europe⁴ suggests that a computer is essential if the system is to be efficient. Can a voluntary organization provide a complex service of this kind? It would seem to be a task more suitably undertaken by the Department of Health and Social Security. But on the question of individual consent the Government is right to postpone changes in the law until public opinion is clearly in their favour.

Arteriography in Splenic and Hepatic Disease

Selective arteriography of the coeliac axis and its branches is an important technique for investigating diseases of the liver, spleen, and pancreas. The aorta is approached percutaneously from the femoral artery, and contrast medium is injected through the catheter into the orifices of the emergent arteries.¹⁻³

The technique is valuable in detecting tumours, because these disturb the normal vascular anatomy of the organ. In liver cancer the normal vessels are displaced and distorted, while abnormal vessels are seen entering the area of the tumour. Another noteworthy feature is the diffuse staining of the tumour due to an accumulation of contrast medium in its capacious, thin-walled, vascular spaces.⁴ Cysts and tumours of the spleen are also well delineated, and an indication of the degree of malignancy of the condition is often provided.⁵ Selective arteriography is useful in the early diagnosis of pancreatic cancer,⁶ in which displacement, stenosis, and obliteration of normal vascular channels are more usually seen than are tumour vessels or tumour staining. This may be due to the necrotic, cystic nature of many pancreatic cancers.⁷ The method has also been used with advantage in delineating the portal vein in those cases of portal hypertension in which the standard splenoportography performed percutaneously through the splenic parenchyma proves unsatisfactory, or when the spleen has already been removed.^{3, 8}

L. Blendis, L. Kreel, and R. Williams have recently analysed a series of 161 selective coeliac angiograms in an attempt to correlate the comparative sizes of the coeliac axis

and the splenic and hepatic arteries with the size of the spleen (measured by angiography) in conditions in which there was splenomegaly and in liver disease.⁹ They also investigated the relationship between splenic blood flow and vascular size. Of their cases half were controls suffering from other abdominal conditions necessitating angiography, and about a third of these had systemic hypertension. The remainder consisted mainly of hepatic cirrhosis (some with portacaval shunts), hepatic tumours, and tropical splenomegaly.

Both the coeliac axis and the splenic artery were dilated in patients with cirrhosis and in those with portacaval anastomoses. There was also dilatation of these arteries in tropical splenomegaly, and in most cases of portal-vein thrombosis and liver tumour. By contrast the hepatic artery was not dilated in cirrhosis, tropical splenomegaly, or portal-vein thrombosis, but there was significant widening in cases of portacaval anastomosis and liver tumour. There was lengthening of the splenic artery in patients with cirrhosis and in those with a portacaval anastomosis, but not in cases of tropical splenomegaly.

The spleen was enlarged in cases of cirrhosis but was within the normal range in the great majority of patients with a portacaval shunt. There was a close correlation between the width of the splenic artery and the size of the spleen in cirrhotic and control patients, but no such relation existed between spleen size and the length of the splenic artery, or the widths of the hepatic artery and the coeliac axis. There was moderate splenomegaly in patients with liver tumours irrespective of the presence of cirrhosis. The total blood flow in the spleen was related to the degree of enlargement of the organ. It also correlated with the width of the splenic artery in cases of cirrhosis and blood dyscrasias but not in tropical splenomegaly.

This investigation throws light on the gross vascular changes occurring in diseases of the liver and spleen. Of particular interest is the effect of portacaval anastomosis in widening the hepatic artery in cirrhotic patients. The hepatic arterial dilatation associated with liver tumours can be explained as due to an increased demand for arterial blood, but the enlargement of the spleen and the dilatation of the splenic artery require further investigation. The failure of portacaval anastomosis to narrow the dilated splenic artery in cirrhosis is also surprising in view of the reduction in size of the spleen that follows this operation. More work will be necessary to confirm these findings and assess their significance.

Pyrexia of Unknown Origin

One of the commonest clinical problems a patient may present is a continuing pyrexia in the absence of localizing symptoms and signs. A systematic approach to its elucidation includes a careful history, frequent physical examination, four-hourly records of temperature and pulse, and certain investigations. When a specific system is found to be affected, efforts are directed to its investigation and the patient is no longer regarded as an ambiguous case of P.U.O.

The concept of P.U.O. has changed with the advent of chemotherapy. Inadequate treatment may mask certain

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