54 patients with localized or primary malignant melanoma had circulating cytoplasmic antibody. A few patients formerly positive but who had converted to negative, and some who on clinical grounds had a primary lesion but who had negative tests for cytoplasmic antibody, were found to have developed metastatic lesions.

It is postulated that the halo naevus represents a seldom seen interim stage natural protective mechanism—that is, a rejection phenomenon of malignant melanoma. It is the visualization, so to speak, of the surveillance system normally so effective in preventing malignant melanoma from developing in every individual. The study of such aspects in the behaviour of moles and melanomas raises the question not only why are halo naevi spontaneously rejected and heal, but why do malignant melanomas develop and persist in patients who in all other respects appear to have normal and intact immunological mechanisms.—We are, etc.,

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Particles in Spleens

SIR,—Dr. A. E. Stuart and others have described unusual particles in spleens from cases of idiopathic thrombocytopenic purpura (I.T.P.) and hemolytic anemia (18 December 1971, p. 721). They have called our attention to morphological similarities of these particles with platelet lysosomes, yet they have interpreted these structures as "virus-like particles."

We have observed similar structures in the spleen from a case of sickle cell disease¹ as well as in spleens from other haematological disorders. These structures are most often seen in spleens where phagocytic activity in the spleen is exaggerated (I.T.P. and various haemolytic anemias). They tend to occur in clusters, particularly in sinusoidal linings cells and occasionally in adventitial cells and other macrophages. On morphological grounds we believe they represent platelet lysosomes. The interaction of platelet and vascular endothelium is well known.^{2,3} Platelets are often seen within the vascular endothelium. Recently Molnar and Rappaport⁴ have described the presence of ferritin-laden platelets in sinusoidal lining cells of the spleen in cases of hereditary spherocytosis. Since the lining cells, though phagocytic, notoriously lack lysosomal structures, these workers have suggested that platelet lysosomes may play a part in digestion of red cell particles within the sinusoidal endothelium. It is likely that the phagocytic function of splenic sinus endothelium is accomplished through collaboration of these reticular cells and platelets: the lining cells take up both particulate matter of various origin and platelets, then they use platelet

lysosomes to digest particles they have taken up.

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Testing for Australia Antigen

SIR,—Mr. J. M. Leach and Mr. B. J. Ruck (4 December, p. 597) describe a latex agglutination test for the detection of Australia antigen (HAA) which seems to be quite promising. One problem, however, is a large number of false positives occurring in fresh serum and I think this can readily be eliminated by heat inactivation at 56°C for 30 minutes. The heat would readily destroy complement factor, which has caused false positive latex fixation tests for rheumatoid factor, and we have recently found that a complement factor-like substance can inhibit the detection of Australia antigen when using reaction electrophoresis.¹ This is logical since complement factor mimics rheumatoid factor, which is capable of masking the presence of Australia antigen—even the ultracentrifuged Australia antigen has been shown to be an antigen-antibody complex.^{2,3}

The heat inactivation of the sera to be studied by latex fixation testing would eliminate some false positives (a serum containing true rheumatoid factor might well give a false positive reaction) and also uncover "masked" Australia antigen in certain specimens—thus both specificity and sensitivity would be enhanced.—I am, etc.,

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- 1 Ziegenfuss, J. F., Miller, J., Rossman, D., *New England Journal of Medicine*, 1971, 284, 1104.
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Donors for Organ Grafting

SIR,—We read with considerable interest your leading article (4 March, p. 582) urging the need for more potential organ donors for transplants. A paper will appear shortly,¹ in which we have suggested that the condition of "irreversible brain damage" be legally certifiable by two doctors; they should be independent of the transplant team and one should be nominated by the relatives if they so wished. At the moment, there could be circumstances in which the doctor stopping the resuscitation measures before organ excision might be acting illegally technically.

One would leave the traditional certification of death as it is at present, thus avoiding future legal problems associated with decisions about the precise moment of death. We believe that, with suitable safeguards, the new certification of "irreversible brain damage" should be required before

organ excision is started. This certification would act as legal authorization to stop resuscitation, and to proceed with excision. It would give to transplant surgeons legal protection which may be lacking at present. With this certification, relatives would probably be as willing to authorize excision as they are in the United States.² One would hope that it would go some way towards allaying public anxiety of premature organ excision, and it should thus increase the number of potential organ donors.—We are, etc.,

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Thrombosed Shunts

SIR,—It is well known that when an external arteriovenous shunt is thrombosed and removal of the thrombi fails revision of the shunt is necessary. In patients in whom this has happened repeatedly it can be a great problem to find vessels in good condition for a revision. Two methods are described for salvaging shunts which have thrombosed and which conventional methods have failed to clear.

For external shunts the thrombus was removed through an incision in the vessel distal to the Teflon tip. Angiograms were performed to establish the extent of the thrombosis. Under local anaesthesia, a 2-cm transverse skin incision was made over the site of the thrombosed vessel. A sphygmomanometer cuff was inflated to prevent embolization of the thrombus and to facilitate the phlebotomy. The thrombus discharged itself spontaneously through the incision, aided by irrigation with heparinized saline through the silastic tube of the shunt. To clear thrombi from the arterial side a similar technique is used, the vessel being occluded by a bulldog clamp proximal to the arteriotomy. A rather unusual case prompted me to employ open thrombectomy when a dislodged Teflon tip was removed via a transverse phlebotomy, and the shunt remained patent for a further three months, at which time the patient had a successful cadaveric renal transplant.

Thrombosed internal fistulae can be refashioned by end-to-end anastomosis of the vessels proximal to the block. Under local anaesthetic a transverse skin incision is made 3-4 cm proximal to the previous thrombosed fistula. The artery is formed into a loop, leaving the vein in a straight line.

The above methods have been successful so far in all cases.—I am, etc.,

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Traumatic Perforation of Oesophagus

SIR,—Your timely leading article (26 February, p. 524) concluded with the following sentences: "It is encouraging that the in-