Hashimoto's thyroiditis and rheumatoid arthritis, pointing out that it was not surprising that some of their patients with cirrhosis had polyarthralgia, rashes, raised gammaglobulin levels, and positive cytoplasmic antibodies. The lupus-erythematosus-cell phenomenon was noted in two out of seven patients.

Dr. M. COPPO and Dr. G. F. TEDESCHI (Modena, Italy) had produced autoimmune hepatitis in rats by injecting homologous or autologous liver together with Freund's adjuvant for five to eight months. The histology was that of diffuse cellular infiltration with increased amounts of connective tissue. Serological investigations had shown hepatic complement-fixing antibodies and also precipitins by gel diffusion. The changes were more marked with autologous rather than homologous liver antigens. Dr. H. POPPER (New York) suggested repeating these experiments after blocking the reticulo-

endothelial system. The Kupffer cells protected antigen-antibody reactions, he continued, so possibly blockade might intensify the autoimmune phenomenon which Dr. Copps had been able to produce.

Cancer of the Liver

Dr. U. PLENGVANIT (Bangkok) had treated 40 patients with primary cancer of the liver by hepatic artery ligation under a protective cover of cortisone, penicillin, and streptomycin; only three operative deaths had occurred. There was a decrease or loss of hepatic pain and tenderness and a reduction in the size of the liver in one-half of his patients; in his opinion the six-month survival rate was sufficient to commend this form of treatment for relief of symptoms and some prolongation of life.

Dr. K. OKUDA and Dr. K. TANIKAWA (Kurume, Japan) had found that in extra-hepatic obstructive jaundice bilirubin regurgitated rapidly into hepatic hilar lymph, in which it soon achieved a much higher concentration than in the serum. The same had also been noted when radioactive colloidal gold was injected intravenously; it could be traced to pass from the bile ducts to the portal triad, and thence from the lymph spaces to the thoracic duct. In dogs with hepatic vein occlusion and ascites radioactive colloidal gold injected into the portal vein passed into dilated tissue spaces just below the liver capsule, whence by pinocytosis it communicated through the peritoneal mesothelium with the ascites. The presence of the radioactive gold in subcapsular spaces had been demonstrated by electron microscopy, but thus far they had not undertaken quantitative turnover studies to assess the amount leaking into the ascitic fluid.

NEW APPLIANCES

Plastic Foam Neck Support

Mr. PHILLIP HARRIS, consultant neurosurgeon, department of surgical neurology, Western General Hospital and Royal Infirmary, Edinburgh, writes: A head-and-neck support made of foam plastic has been developed for certain patients who require secure immobilization of the head and neck. It has been used especially for: (1) Patients with cervical disc disease, including the patient with severe neck and arm pain, when it may be used at home instead of a pillow. The appliance is proving useful both pre-operatively and postoperatively in hospital for all patients with neurological disabilities from degenerative disease of the cervical discs (Harris, 1963). (2) The first-aid and initial hospital emergency management of patients with dislocations or fracture-dislocations of the cervical spine. (3) The immobilization of the neck after certain other operative procedures, such as progressive

clamp-occlusion of a carotid artery for an intracranial aneurysm (Harris and Udvarhelyi, 1957). (4) Situations where a special neurosurgical head-rest is not available.

There would seem to be uses for this head-and-neck support in other branches of surgery.

The appliance consists of a "yoke" of foam plastic with an extension of this material for the head (Fig. 1). It is suitable for any adult patient of average size. The patient's neck lies in the U-shaped portion and his head on the head-rest, and in this way firm support to the head and neck is obtained and the patient is remarkably comfortable. Sandbags are no longer required to fix the head, and no pillow is used (Fig. 2). The support may be covered with stockinet (Fig. 3). It can be washed with soapy water containing a disinfectant. If required, radiographs may be taken through it, as it is

radiotranslucent. The support is cut away above the shoulders so that full shoulder movements may be possible while the appliance is in use.

The support has been developed in conjunction with Mr. J. McNeil, splint-maker, Royal Infirmary, Edinburgh, and Mr. H. G. Meredith, of Messrs. Allen & Hanburys (Surgical Engineering) Ltd., and has been used successfully for many patients during the past two years. It may be obtained from Messrs. Allen & Hanburys (S.E.) Ltd., Bethnal Green, London E.2, and branches.

I am indebted to Mr. T. C. Dodds, F.I.B.P., medical photography unit, Edinburgh University, for the photographs.

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FIG. 1.—Plastic foam neck support.

FIG. 2.—Support in use.

FIG. 3.—Note stockinet cover.