

ANY QUESTIONS?

We publish below a selection of questions and answers of general interest.

Ascitic or Cystic?

Q.—*What are the visible and analytical differences in fluid drawn from the abdomen which would distinguish ascitic fluid from that from an ovarian cyst?*

A.—The question implies that a study of the appearance and physical and chemical properties of fluid drawn from the abdomen would allow an absolute distinction to be drawn between ascitic and ovarian cyst fluid. Intensive investigation, involving complex physico-chemical techniques,¹ could probably produce data adequate to permit an accurate conclusion to be reached, but such analyses are beyond the compass of the routine hospital laboratory.

The difficulty arises largely because of the considerable variation in appearance and content of both types of fluid, depending on the cause of the ascites and type of ovarian cyst. To these difficulties must be added the possible presence of haemorrhage, infection, and malignancy. The result is a wide overlap in both appearance and amounts of the various constituents of the fluids.

The three main types of cyst fluids may be classified as pseudomucinous, pseudomyxomatous, and serous. The two former tend to be more viscous than most ascitic fluids, whereas the latter type has a protein content akin to that of serum, and therefore is not easily distinguished from ascitic fluid. The pseudomyxomatous material is a mixture of serum protein and glycoprotein, and this mixture, unlike that of the other fluids, is immiscible with saline but soluble in dilute alkali. Pseudomucin ("pseudo" because, unlike mucin, it is not precipitated in the cold by dilute acetic acid) is also glycoprotein (differing from that of the pseudomyxomatous type mainly in sialic acid and fucose content), and its presence may be demonstrated by ethanol precipitation of the cyst fluid after it has been heat-coagulated, filtered, and concentrated. However, serous cyst fluid may contain a small amount of glycoprotein also.

Thus a high glycoprotein content in the fluid favours an ovarian cyst of pseudomucinous or pseudomyxomatous type, the two being distinguished fairly easily, and a serous fluid suggests ascites or serous cyst. In the absence of some unusual feature, such as bile-staining, or help from cytological studies, study of the patient herself is more likely to be rewarding in distinguishing between ascites and a serous cyst.

REFERENCE

¹ Odin, L., *Acta Soc. Med. upsalien.*, 1959, 64, 25.

Treatment of Schistosomiasis

Q.—*What is the most effective treatment for schistosomiasis?*

A.—There seems little doubt that sodium antimony tartrate constitutes the most effective treatment for schistosomiasis when given as a total dose of $\frac{1}{2}$ gr. (32 mg.) per kilogram of body weight to a maximum of 30

gr. (2 g.). Whenever possible the patient should be kept in bed for the whole of the course, the duration of which depends to a large extent on individual tolerance. Rarely can the single dose exceed 2 gr. (130 mg.). It should be given intravenously, well diluted in perhaps 20 ml. of saline, over a period of 10 to 15 minutes. Side-effects such as coughing, vomiting, and joint pains may be greatly reduced by careful administration, but electrocardiographic changes and skin manifestations are not so influenced. An almost 100% cure rate may be expected.

Sodium antimony gluconate intravenously and sodium antimony dimercaptosuccinate given intramuscularly provide courses lasting five to six days. In general, the side-effects are less unpleasant but E.C.G. changes are just as common as they are after sodium antimony tartrate, and severe dermatitis may occur. Case rates in excess of 80% may be expected, and this may be even higher after a longer course of sodium antimony gluconate. Again, if possible the patient should be kept in bed.

Anthiomaline and stibophen are relatively ineffective antimonials; Nilodin (lucanthon

hydrochloride) is less effective than the better antimony compounds and may give rise to quite severe gastro-intestinal side-effects in some people. In this country treatment for schistosomiasis should be carried out in hospital.

A clinical trial of Ambilhar, a new oral schistosomicide, was recently reported.¹

REFERENCE

¹ *Brit. med. J.*, 1966, 1, 276.

Inhalation of Benzene

Q.—*What toxic effects may arise from the handling of a spirit similar to petrol and containing a complex of aromatic hydrocarbons and a small amount of tetraethyl lead? The concentration of benzene is less than 0.1% by weight. It is used for removing the protective wax coating from new motor vehicles. Provided the handler's skin is protected, is there any danger from inhaling the fumes?*

A.—Since the concentration of benzene (C₆H₆) in the spirit is less than 0.1% by weight there would be no risk of significant absorption of benzene. If used in an inadequately ventilated area headache, irritation of mucous membranes, or narcosis could occur. It should not therefore be used in a confined space.

Notes and Comments

Aetiology of Schizophrenia.—Dr. D. T. MACLAY (Uffculme Clinic, Birmingham 13) writes: Your expert's reply to this question ("Any Questions?" 12 March, p. 659) gives an excellent brief summary of the subject, but the quotation from Mayer-Gross *et al.* is unfair to specialists in child guidance (child psychiatry) by implying that we make "entirely irresponsible claims." I am unaware of such claims made by my colleagues in this specialty.

Your expert allows "that it [schizophrenia] is due basically to a dominant gene whose low penetrance is brought about by modifying genes and the effects of the external environment." Why then does your expert say later on that nothing can be done to arrest its development? If the effect of the external environment is relevant then one might hope that improvements in the environment would do something, even if only a very little, to reduce the development of schizophrenia. What I, and I think many of my colleagues, believe is that in those cases where the modifying genes have already lowered the penetrance of the dominant gene a child whose home is characterized by warm, sound, and understanding child-parent relationships may overcome the inherited tendency and not develop the disease, whereas another child equally placed as regards inheritance, but whose home environment is less loving and more stressful, probably will develop it. Thus by increasing understanding and improving domestic relationships we might reduce the incidence of this tragic mental illness by just a very little. If the inherited tendency is one of strong penetrance then no treatment and no environmental modification are likely to do any good.

How far infantile psychosis (infantile autism) is the same illness as schizophrenia is problematical, and some cases certainly appear not to be. In at least a number of cases of this

condition, however, there is concrete evidence for believing that skilled therapy, if frequent and long-sustained, is worth while both for its research and its remedial value.

OUR EXPERT replies: I quite agree with the views expressed by Dr. Maclay. We do not know the environmental factors that are likely to modify the manifestation of schizophrenia in an individual genetically predisposed to the condition, but it is reasonable to suppose that an emotionally warm and supporting environment may at least protect the patient from stresses and strains which are known to provoke the exacerbation of symptoms in schizophrenia. This general principle is likely to hold good both in infantile psychosis (infantile autism) and in schizophrenia, although, as Dr. Maclay points out, the relationship between these groups is problematical, and both are probably heterogeneous, aetiologically and clinically.

Corrections

In the leading article on Prophylaxis of Rh-immunization (12 March, page 268) the figure of 25,000 doses of anti-D gammaglobulin required per year referred only to primiparae. If it is to be given to all Rh-negative women giving birth to ABO-compatible Rh-positive infants the number of doses required would be between 75,000 and 100,000 per year. Further, the antibody is given to Rh-negative women, not Rh-positive, as inadvertently stated.

We regret that in the letter on posture, gravity, and serum levels from Drs. C. B. M. Dalderup and L. M. Dalderup published 19 March, p. 737, the names of the authors were misspelt.