

(52 cases); (d) benign prostatic hypertrophy—clinical diagnosis only (60 cases); (e) other cancers (57 cases); (f) other urological illness (22 cases); (g) miscellaneous disease (116 cases); (h) undiagnosed (15 cases). The mean activity (SD) of the miscellaneous group was 1.97 (1.07) IU/litre at 37°C, giving an upper normal limit (mean + 2 SD) of 4.1 IU/litre. The AcPase values in this group did not correlate with age ($r = 0.040$). Eight patients with untreated carcinoma of prostate (22%) had values ≤ 4.1 IU/litre. Six of these had no prostatic enlargement and no metastases; the remaining two had enlarged prostates but no evidence of metastases. All 28 patients in this series with soft tissue (7) or bony (21) metastases had AcPase > 4.1 IU/litre. Values > 4.1 IU/litre were found in seven cases (6%) of benign hypertrophy, three cases (5%) of non-prostatic cancer, two cases (2%) of miscellaneous illness, and one case (6%) of uncertain diagnosis. No values > 4.1 IU/litre were found in the patients with other urological illness.

Sixty per cent of patients (26 cases) with untreated prostatic carcinoma had elevated serum alkaline phosphatase activity (APase), ie, > 15 KAU/100 ml as determined by an AutoAnalyzer adaptation of the method of Kind and King (1954). Correlation between the two phosphatases was not significant ($t = 0.294$; $P > 0.05$). APase was elevated in the presence of normal AcPase in only three cases of prostatic cancer, but all three were without metastases. Two further cases with minimal elevation of AcPase had APase > 50 KAU/100 ml. While APase is less frequently elevated than AcPase in prostatic cancer patients, it provides valuable confirmation of the diagnosis when the latter is normal or equivocal.

References

- Ellis, G., Belfield, A., and Goldberg, D. M. (1971). *J. clin. Path.*, **24**, 493.
 Kind, P. R. N., and King, E. J. (1954). *J. clin. Path.*, **7**, 322.

A Survey of Hepatitis in Laboratories

N. R. GRIST (*Department of Infectious Diseases, University of Glasgow*) A preliminary enquiry from ACP members suggested a rising incidence of hepatitis which was reported from 58 of 285 laboratories for 1964-69 from 32 of 289 for 1970. Of 127 cases, 87 involved technicians and 48 affected workers in biochemistry. A continuing more detailed enquiry was initiated with the following results:

Information for 1970 from 244 laboratories showed 13 hepatitis cases in 12 laboratories. Attack rates were highest in science microbiologists (1/126 = 0.79%) and biochemistry technicians (7/1438 = 0.49%), the overall rate being 13/11253 (0.116%).

Information for 1971 from 215 laboratories showed 18 hepatitis cases in 15 laboratories. Attack rates were highest in science biochemists (2/315 = 0.63%), medical haematologists (2/315 = 0.64%), and medical morbid anatomists (2/390 = 0.51%); no cases were reported among biochemistry technicians.

Hepatitis B ('Australia') antigen was found in 11 of 22 cases tested over the two years and was associated with less mild illness; there was no death.

Among laboratories with hepatitis cases, more than average tested specimens from haemodialysis, transplant, and haemophilia units, and from drug addiction centres (1971 but not 1970). Risk was unaffected whether high-risk specimens were tested by general staff, special unit staff, or not accepted, or whether they were tested on mechanized apparatus in general use or segregated or not tested on such apparatus. Only slightly increased risk was found in laboratories testing for Australia antigen.

Bacteraemia in the Burned Patient

H. J. K. M. MAMATTAH, C. H. BEARD, AND D. M. JONES (*Withington Hospital, Manchester*) Burns are regularly colonized by a variety of bacteria, often without clinical evidence of infection. In some patients, due to various factors, colonization progresses to invasion and septicaemia. A study has been made of the influence of operative procedures, ie, desloughing and excision of necrotic tissue on the infective process. A series of unselected operations were monitored by taking a series of blood cultures while the operations were in progress. Out of 52 blood cultures, 17 (33%) were positive and nearly half of these grew more than one organism. Bacteraemia was detected in 40% of the operations studied and often appeared to be of 10 to 20 minutes' duration. The bacterial species grown by blood culture were always present colonizing the burn although not all the colonizing species were recovered in the blood cultures. Attempts were made to relate the findings to the severity of the burn, to the magnitude of the operative procedure, and to the time that had elapsed between the burn and the operation. In spite of bacteraemia none of the patients studied were treated with antibiotics and in no case was systemic infection established. Immunoglobulin levels are depressed for a few days after the patient is burnt but in the patients studied immunoglobulin levels were found to be normal at the time of operation and bacteraemia. The average timing of the operations was 20 to 25 days after the burn. Comparison of these results with observations made when septicaemia became established following