

The Association of Clinical Pathologists: 87th general meeting

The 87th general meeting of the Association of Clinical Pathologists was held at Imperial College, London on 23 and 24 September 1971. The meeting, as well as offering the opportunity for individual scientific communications, abstracts of which follow, included four symposia: 1 'Design of laboratories'; 2 'The WHO programme for the histological definition and classification of tumours'; 3 'Effects of centralization on laboratory services'; and 4 'Micrococci: the classification, ecology, and pathogenicity of coagulase-negative staphylococci'. The Presidential Address by A. G. Marshall was on 'The body politic in pathology'.

A Laboratory Study of Macrocytic Anaemia in the North-east Region of Scotland, 1965-70

R. J. L. DAVIDSON (*City Hospital Aberdeen*)

This survey is based on 812 laboratory proven cases of macrocytic anaemia (excluding macrocytic anaemia of pregnancy) detected on routine screening of blood samples submitted by the general practitioners of the N.E. Region during 1965-70 inclusive. Some of the epidemiological and laboratory findings, including the serum B₁₂ and folate status, are presented and briefly discussed.

Of the 1,158 cases initially suspected of having a macrocytic anaemia on morphological grounds, 991 (85.6%) were followed up by the laboratory and of these 812 (81.9%) were found to have low serum B₁₂ and/or low serum folate levels. Only 257 (25.9%) of the patients followed up were admitted to hospital for further investigation. The potential value of a diagnostic and advisory service in haematology for general practitioners is emphasized.

Association of White Cell and Red Cell Antibodies in Human Sera

D. C. O. JAMES, J. ROSS, and LEE HUMMELEN, (*Westminster Hospital, London*)

Five hundred and eighteen serum specimens containing known red cell antibodies were tested for the presence of anti-lymphocytic antibodies. The method used

was the microcytotoxicity technique employing the plastic Terasaki plates and rabbit complement.

Eighty-one of the 518 specimens tested were found to contain white cell antibodies, ie, 15%. Of these 81 sera, 39 contained antibodies which could be identified, 23 being monospecific 10 dispecific, and six containing more than two antibodies. The white cell antibodies in the other 42 specimens were either too weak to identify, polyspecific, or unidentifiable specificities.

The white cell antibodies were classified according to the WHO nomenclature (HL-A) and antibodies AA, BB, and LND were also found.

In the sample studied no significant correlation between any particular white cell and red cell antibodies was found. The most common red cell antibody in the 518 specimens was anti-D (87%). In the specimens containing white cell antibodies the frequency of this antibody was 83% which is not significantly different.

If a larger series of specimens was tested it might be possible to obtain some correlation between red cell and white cell antibodies, but using 518 specimens no correlation could be found.

Association between Pernicious Anaemia and Rheumatoid Arthritis: a Serological Study.

H. A. GHAZI (*Sheffield Royal Infirmary*)

We have attempted a study of a possible association between rheumatoid arthritis and pernicious anaemia by screening 99 patients with pernicious anaemia (40 men, average age 65.2 years; 59 women, average age 66.2 years) for rheumatoid factor and 135 latex fixation seropositive patients with rheumatoid arthritis (55 men, average age 52.7 years; 80 women, average age 49.3 years) for intrinsic factor antibody. Control sera from 172 subjects (87 men, average age 59.7 years; 95 women, average age 53.8 years) not known to be suffering from pernicious anaemia, rheumatoid arthritis, thyroid disease, or diabetes mellitus were tested for both rheumatoid factor and intrinsic antibody. The latter was detected by a modified charcoal adsorption technique and rheumatoid factor by latex fixation (Rheuma-Wellcotest).

Intrinsic factor antibody was not found in any of the 135 latex fixation-positive rheumatoid sera or 182 control sera, whereas 51/99 pernicious anaemia sera were

intrinsic factor antibody positive. Of the 99 patients with pernicious anaemia five had evidence of clinical rheumatoid arthritis and 11 (five men, six women) had rheumatoid factor in the serum. Seven of 182 control sera were latex fixation positive (four men, three women); a comparison with the pernicious anaemia group showed a significantly greater incidence of rheumatoid factor in the latter (χ^2 5.64; P 0.025-0.010). On excluding all subjects below the age of 50 from the study, the incidence of rheumatoid factor was 11 of 94 in patients with pernicious anaemia (five men, six women) and five of 115 controls (two/63 men, three/52 women). On comparison, again there was a significantly higher incidence of rheumatoid factor in the patients with pernicious anaemia (χ^2 3.94, P 0.05-0.02).

Within the pernicious anaemia group the incidence of rheumatoid factor was not significantly greater among those with intrinsic factor antibody (seven/51) than those without the antibody (four/48) (χ^2 0.78, P 0.50-0.30).

Fatal Pneumonia of Infancy Associated with Group O Streptococci

C. A. MORRIS (*Public Health Laboratory Service, Shrewsbury*)

Group O streptococci may occasionally cause acute tonsillitis (Boissard and Wormald, 1950) and have been isolated from the blood of an adult with pneumonia (Duma, Weinberg, Medrek, and Kunz, 1969). Recorded here is an isolation from a 3-month-old baby. The child was well the night before death, but was heard gurgling at 6.45 am and found dead at 9.20 am.

At necropsy, seven hours later, the infant appeared well nourished and of appropriate size for its age. Appearances suggested the child had died lying on its right side. The larynx, trachea, and bronchi contained fine froth. Both lungs were mottled by slight patchy collapse and histology showed marked oedema and patchy, but heavy, infiltration of the air sacs by mononuclear cells. Scanty cocci were seen in some sections. There was no evidence of aspiration of vomit.

Smears from lung parenchyma showed moderate numbers of pus cells but no organisms. A moderate and pure growth of beta-haemolytic streptococci was cultured.

The bacteria showed characteristic colonies and biochemical reactions.