

Abstracts From the Journals of the East

Pages with reference to book, From 245 To 247

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The Clinical Evaluation of An Outbreak of Aseptic Meningitis in Children. Tang, RB., Chen, S.J., Wu, KG., Lee, B.H., Hwang, B. China MedJ. (Taipei), 1996;57: 134-138.

A retrospective analysis was carried out on 62 children with aseptic meningitis. There were 39 boys and 23 girls with a mean age of 6.3 years. The illness was characterised by transient fever, headache and vomiting. CSF specimens were obtained from all patients and 17 showed a positive culture for enteroviruses. In the remaining 45 patients, diagnosis of aseptic meningitis was based on CSF leukocyte count and a negative bacteriological study. The mean white cell count was $275/\text{mm}^3$. The positive CSF culture specimens did not necessarily have a higher cell count. The peripheral V/BC count had a mean value of 10,078/mm with 63 percent neutrophils. The CSF protein ranged from 19 to 114 mg/dl and CSF glucose was normal.

Forty-five children had a mild illness and bacterial infection was excluded. They were kept only under observation. Early withdrawal of antibiotics was carried out in 16 patients due to central nervous system syndrome. One case with CSF pleocytosis received antibiotics for 14 days and then the CSF culture revealed enterovirus. The disease was self limiting with no mortality.

The association of echovirus 30 and aseptic meningitis is well known and can cause large outbreaks. Clinical diagnosis is difficult. CSF analysis shows a raised WBC count and protein content and a normal glucose level and this is suggestive of aseptic meningitis. Enterovirus isolation from CSF and non-specific sites can substantially establish the diagnosis. Recently enteroviral RNA has been detected by polymerase chain reaction. This technique may become the screening method for enteroviral meningitis.

Visceral Leishmaniasis in Karachi. Nawab, H., Ehsanullah, S., Haider, W., Khanani, R., Specialist, Pak.J.Med.Sci., 1996;12:217- 220.

Four cases were diagnosed as visceral leishmaniasis out of 20 patients with splenomegaly. The first one was a 20 year old male from Bangladesh with high grade intermittent fever. Examination revealed splenic enlargement of 6.5 cm and liver 3 cm below the costal margins. There was no lymphadenopathy. He was anaemic with a haemoglobin of 7.0G and the bone marrow showed moderate depression of all normal cell line. Bone marrow aspirate culture gave a result of leishmaniasis promastigotes. The second patient was a 9 year old boy from Turbat with high grade fever and liver enlargement of 3 cm below the costal margin. The haemoglobin was 6.0G and the total white cell count 3.7×10^3 . Bone marrow examination showed depression of the normal cell lines. Large numbers of amastigote forms both intra and extra cellular were seen and culture grew leishmania promastigotes. The third case was a 10 year old boy from Balochistan with an ulcer on the right leg and intermittent fever. The spleen was enlarged 5 cm below the left costal margin. There was an ulcer of 5 cm diameter on the right leg. The haemoglobin was 6.5G, total white cell count 2.2×10^3 and the bone marrow smear showed a large number of amastigotes. The culture grew leishmania promastigotes in 5 days. The fourth patient was a 25 year old woman originally from NWFP but living in Karachi since 4 years. She complained of low grade fever, weakness and abdominal pain. Physical examination revealed a splenic enlargement of 5 cm below the left costal margin. Laboratory investigations gave a positive culture for L.D. bodies.

Leishmaniasis is a zoonotic disease caused by leishmania, a protozoan parasite. The visceral involvement is caused by leishmania donovani and leishmania infantum. Transmission occurs by bite of the sand fly. The duration of infection in 3 of the presented cases was 1-6 months and more than 4 years in one case. Splenic enlargement was common in all the cases whereas two had hepatomegaly.

Anaemia and leukopenia was present in all due to bone marrow depression. It is suggested that every case with unexplained splenomegaly with anaemia and leukopenia with pyrexia should be investigated for leishmaniasis.

Clinical Profile of Atrial Septal Defect in a Cardiac Hospital Aziz, KU., Tasneem, H., PakHeart J., 1996;29:7-10.

The hospital records of 115 patients diagnosed as Atrial Septal Defect (ASD) were retrospectively analysed. The diagnosis of ASD was made by 2-dimensional colour flow Doppler echocardiography and the size was described as small (less than 1 cm) moderate or large (more than 2.5 cm). Right ventricular outflow tract was interrogated by echocardiograph and pulmonary arterial pressure was evaluated from the pressure gradient at the tricuspid valve. Symptoms were noted from the history sheet. Cardiac catheterization and angiography had been performed on 24 percent cases.

There were 59 females and 56 males with 40 percent patients being less than 18 years age (mean 11.6 years). Secundum atrial septal defect of fossa ovalis type was detected in 99 patients whereas 9 had sinus venosus type, 6 at primum septum and only one had coronary sinus ASD. Associated lesions were found in 21.7 percent cases with the most common one being pulmonary valve stenosis in 8 cases. Of the 46 children studied, 12 were asymptomatic and the presence of a cardiac murmur led to the diagnosis. Recurrent chest infection were noted in 10, palpitation in 12, chest pain in 5 and abdominal pain and dyspnoea in 2 each. Cyanosis was present in the child with coronary sinus type ASD.

In adults, chest pain was the main symptom in 41 patients. Palpitation was present in 35, shortness of breath in 31 and six individuals were asymptomatic. Recurrent chest infection was noted in 5 cases, congestive heart failure in 2 and cyanosis in one patient only. The pressure gradient studies revealed 3 children and 11 adults to have pulmonary arterial hypertension. Surgical closure was achieved in 26 cases, 33 were being followed up medically and 56 were lost to follow up.

Usually ASD is asymptomatic in childhood and is easily missed as there is no routine for a general physical examination regularly. In adults symptoms start appearing due to development of pulmonary arterial hypertension. Early detection and timely intervention can relieve suffering and save the additional financial burden.

Selection of an Antibiotic in Acute Otitis Media. Rafi, T., Kharal, S., Zaidi, S.H., Pak.J.Otolaryngol., 1996; 12:154-157.

A study was conducted on 100 cases of Otitis Media to identify the common pathogens and the drugs to which they respond in terms of clinical and bacteriological cure. The aural swab was collected and specimens cultured on chocolate agar using blood agar base and incubated at 37°C and CO₂ enriched surroundings. Antibiotic sensitivities were determined by the disc diffusion method using Muller Hinton Agar. The zones were graded. For the presence of B-lactamase in the isolates the Nitrocefin method was utilized.

According to the microbiology report, antibiotics were prescribed for 8 to 10 days and the clinical response observed. The cured cases were reassessed with a culture and sensitivity after a gap of 4 to 5 days to note a bacteriological cure. The ages of the patients varied from 3 months to 55 years (mean 6 years). The organisms isolated were streptococcus pneumoniae 45% haemophilus influenzae 22%, Moraxella catarrhalis 14%, beta haemolytic streptococci 7%, klebsiella 6% and staphylococci 6%. The highest incidence of B-lactamase production was seen with Moraxella catarrhalis 78%, H. influenzae 70% and staphylococcus aureus 65%.

Most of the commonly used antibiotics as Penicillins, Erythromycin, Doxycycline and Sulphamethoxazole and Trimethoprim were found to be ineffective suggesting their inappropriate use leading to resistance. First, second and third generation cephalosporin were found to be very effective. These included Amoxicillin and Clavulanic acid, Salbutamol and Ampicillin, Clarithromycin, Spymycin and Cefopodoxime. Quinolones though being effective have a low activity against pneumococci and are contraindicated in children. It is thus advisable that in cases of acute otitis media appropriate antibiotics with precise effectiveness against organisms should be used. This will provide a

complete cure and avoid resistance.