from Kuwait, will be presented. There are four boys and one girl with onset of symptoms between the ages of 1 and 3 years. The diagnosis was essentially clinical but verified by plain lumbosacral x-ray or scintigraphy. In one case gallium imaging was used. Blood cultures were sterile. The ESR was moderately increased, while WBC was normal or slightly increased. After antibiotic treatment all children recovered completely after 2 to 3 months. The differential diagnosis and the rationale of antibiotic treatment will be discussed. It is important to focus the attention of doctors caring for children on this disorder.

ORAL REHYDRATION THERAPY AND THE RISK OF HYPERNATREMIA, G Ebrahim, The Hospital for Sick Children, London

Oral rehydration therapy (ORT) is being actively promoted in all developing countries and is currently estimated to be saving 1 million children's lives each year. However, doubts have been raised concerning the quantity of sodium in the formula and the consequent risk of hypernatremia, even though in all carefully controlled trials a solution with sodium content of 90 mmol/L has been found to be safe. The efficacy of the current formula was tested in a study of 3,227 children under 3 years attending a children's hospital in Cairo with diarrhea during the peak summer season in 1987. About half of these children had no clinical signs of dehydration. Those with clinical signs were retained for oral rehydration therapy, in the Rehydration Centre, using the WHO formula, or admitted for intensive treatment if shocked or severely dehydrated. Serum sodium was measured in all inpatients (75 cases) and in a 1-in-9 sample of those treated in the Rehydration Centre (165 cases). Hypernatremia was diagnosed in 55 children. Of these, 16 with moderate hypernatremia (serum sodium 150 to 165 mEq/L) responded to ORT alone in the Rehydration Centre. In those with severe hypernatremia (serum sodium > 165 mEq/L), ORT was alternated with drinks of water or breast milk together with intravenous therapy where indicated. The intravenous fluid used has a composition similar to the one used for ORT. It is concluded that the formula for oral rehydration as currently advocated is appropriate. The events and factors associated with hypernatremia are age less than 6 months, severe dehydration, and the use of traditional drinks. The risk of hypernatremia increased with delay in instituting ORT, particularly when medical advice was sought in the private sector with more reliance being put on antibiotics and antidiarrheal agents instead of ORT.

TUBERCULOSIS IN MOROCCO, H Khalifa, Hopital d'Enfants, Casablanca, Morocco

A retrospective study of tuberculosis in children was done in 157 patients between January 1982 and December 1986. Children over 7 years old were more often affected, and both sexes were about equally represented. The contamination was mainly due to family contact. The number of vaccinated and supervised cases was insignificant (11 cases). Respiratory tuberculosis predominated in 56.8% of cases and is mainly represented by the parenchymatous localization (65 cases or 61.9% of respiratory tuberculosis). The adenoid tuberculosis is more represented in extrarespiratory tuberculosis (44 cases or 55% of the extrarespiratory tuberculosis). Multilocalization increased in 17.2% of cases and is often translated by a pleurilung association. Despite the decrease of numbers of cases every year, efforts need to be focused on treatment, prevention by BCG vaccination, and social health.

FUNGAL ALLERGENS IN THE ATMOSPHERE OF SAUDI ARABIA: ALLERGENS IN RIYADH, A Al-Frayh, SM Hasnain, JD Wilson, HA Harfi, King Khalid University Hospital and King Faisal Specialist Hospital and Research Centre, Riyadh

Airborne spores and pollen grains are known to cause respiratory diseases such as bronchial asthma and allergic rhinitis. Both diseases are common in Saudi Arabia, particularly among children. To record the presence, identity, and quantity of such allergens in our environment and to prepare a diagnostic test profile for the Kingdom, aerobiological studies are being conducted in Jeddah, Dammam, and Riyadh, employing Burkard volumetric spore traps and gravity culture plate techniques. Airborne propagules are being monitored continuously, hour by hour, each week. Data from the Riyadh area analyzed from November 1986 to August 1987 revealed the presence of spores from various allergenic fungal species. *Cladosporium* (SLD) and *Alternaria* (ALT) spp, constituents of the dry-air spora and well-known allergens, as well as *Chaetomium* (CTM) spp, smuts chalamydospores, and *Ulocladium* (ULD) spp were among the major components. Ascospores and basiodiospores, constituents of the damp-air spora, some species being allergenic, were also recorded. Concentration of the overall spores per cubic meter of air fluctuated monthly, indicating some seasonal variations. Circadian periodicities of CLD and ALT displayed a diurnal pattern, while CTM and ULD exhibited a nocturnal pattern. The maximum concentration recorded at any specific hour reached 6039 for CLD and 366 for ALT per cubic meter of air. Diversities in the quantitative composition of these airborne allergens from Jeddah and Dammam have been noted. The study, though still in progress, revealed for the first time the presence of some important allergenic and other suspected fungal genera in the atmosphere of Riyadh. The findings support the inclusion of antigenic extract from fungi, preferably prepared from local strains under local conditions, for skin testing in the Riyadh area and substantiate the preparation of a national atopy diagnostic test and treatment (desensitization) profile.

FOREIGN BODY ASPIRATION IN CHILDREN: A REPORT OF OVER 300 CASES, MJY Haddad, M Abu-Khalaf, S Saleh, A Qudah, Jordan University Hospital, Amman, Jordan

In our country foreign body aspiration continues to be a major cause of unexplained recurrent chest infection or acute respiratory distress in childhood. During the last 14 years over 300 cases of suspected foreign body aspiration in the tracheobronchial tree were admitted to Jordan University Hospital. These cases were reviewed and results were analyzed. Aspiration of foreign body is common in children aged 1 to 4 years, 95% of the patients were under 10 years of age, 40% gave a clear history of foreign body inhalation, and the rest were diagnosed clinically because of unexplained respiratory symptoms. Bronchoscopic examination under general anesthesia was carried out in all cases using the rigid bronchoscope. Foreign bodies which could not be removed endoscopically were removed surgically, a rare occurrence. A variety of foreign bodies were removed, with melon seeds heading the list. Steroids were not used routinely with minimal postbronchoscopy complications. Suspicion of aspiration is itself an indication for bronchial examination. Early diagnosis and management are essential to prevent respiratory complications.

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