

SELECTED ABSTRACTS FROM NATIONAL MEDICAL JOURNALS

Pages with reference to book, From 290 To 291

Fatema Jawad (7/6, Rimpa Plaza, M. A. Jinnah Road, Karachi.)

A CASE OF ALKAPTONURIA. Khan, N.R., Khan, S.N. and Maqbool, S. Pak.J.Med.Res., 1990;29:51-52.

A five and a half months old baby was brought to the Paediatric department, Shaikh Zayed Hospital, Lahore with a history of passing, since birth, normal colour urine which turns dark on standing. The mother had noted dark coloured stains on the diapers. The growth and development along with the physical examination were normal. The parents were noted to be first cousins with the presented child being their first born. A urine analysis of a freshly passed specimen showed the colour to be light yellow, pH 5.0 and specific gravity 1015. On standing the surface of the urine turned dark. A test for reducing substances was positive and addition of alkali hastened the darkening of the colour. A ferric chloride test was positive for homogentisic acid. Amino acid chromatography was normal. On the basis of the screening test a diagnosis of alkaptonuria was made. Alkaptonuria was first described by Archibald E. Garrod in 1902. He determined a relationship between genes and enzymes and alkaptonuria was the first condition to be identified as an inborn error of metabolism. It has an autosomal recessive inheritance. A deficiency of homogentisate oxidase exists due to which all ingested tyrosine is excreted in the urine as homogentisic acid. This hydroquinolone on standing autooxidises and forms a dark colour. Due to absence of the enzyme, homogentisic acid accumulates in the cells and body fluids. Clearance by the kidneys is rapid and 3 to 7 gm of the substance may be excreted in the urine. Homogentisate is oxidised to alkapton, a pigment which is deposited in bones, connective tissue and various organs. This generalised pigmentation is called ochronosis. Degenerative joint disease appears in majority of the cases in middle age. Foci of homogentisic acid deposition become evident as grey brown scleral pigment and darkening of the concha, antihelix and helix of the ear. Ankylosis of the lumbo-sacral spine and occasionally pigmented renal or prostatic calculi may develop. There is no specific treatment for achronotic arthritis. Dietary restriction of phenyl-alanine and tyrosine has also been discouraged.

EVALUATION OF SOLITARY COLD NODULE OF THYROID: FINE NEEDLE ASPIRATION BIOPSY AND CYTOLOGY AS A MAJOR DIAGNOSTIC TOOL. Khan, S.H. and Khaliq, T. J.Pak.Instit.Med.Sc., 1990;1:11-13.

Of the 118 cases of nodular goitre admitted in the surgical ward of P.I.M.& from May, 1987 to August 1988 there were 78 of solitary cold nodules. The procedure of fine needle biopsy was performed on these patients to demonstrate its benefits and limitations in histological evaluation and planning of surgery. A disposable plastic syringe of 20cc with 20-32 gauge needle was used. A piece of the thyroid tissue was aspirated out by pulling back the plunger. The contents were squirted out on to a glass slide and a smear was prepared. The slide was fixed with 95 percent alcohol stained with H & E stains and examined under high power using the oil immersion lens. Based on the cytological diagnosis of needle aspiration, the respective surgery was performed. 13 cases were found to be malignant and were subjected to more extensive procedures. Clear cut correlation between needle biopsy findings and histopathology findings were present in the purely benign and malignant cases. Only in 6 cases the two results did not coincide due to being atypical. The fine needle aspiration biopsy was found to be a safe and simple method with a high degree of accuracy and diagnostic specificity. Complications were few as small subcutaneous haematoma formation and light headedness which was transient. The procedure can be performed in the office at a low cost and unnecessary surgery is avoided.

RELATIONSHIP OF STROKE TO HYPERTENSION AND AGE RELATED RISK OF

STROKE IN MEN AND WOMEN. Khawaja, I., Tarlq, M., Badshah, M. and Suhafi, R. J.Pak.Instit.Med.Sc., 1990;1:15-17.

A study was conducted to assess the age and sex related risk of stroke and its association with hypertension. All cases admitted to the neurological ward of P.I.M.S. between July, 1987 and February, 1989 were included in the study. All cases with systolic blood pressure recording persistently higher than 160 mm and diastolic above 100 mm were labelled as hypertension. A detailed past history was obtained and blood pressure was recorded regularly. No sex difference was found in the various age groups except in the 55 to 64 years range where women were more vulnerable. A significant preponderance of females was noted in this group. The reason could be attributed to the social conditions prevailing in Pakistan. Women are generally at home with less medical care. The Framingham study data showed the maximum number of strokes to occur between the ages 75 and 84 years. The presented study revealed an earlier age group of strokes 55 to 64 years. The association of hypertension with stroke was found to be 58 percent in women and 56 percent in men in this study. The questions arising from the study are if women are more prone to strokes than men in Pakistan? Are relatively younger people afflicted by strokes and what is the incidence of stroke in the country? Large cross sectional studies would be needed for the answers.

CONSERVATIVE SURGERY THROUGH OBLITERATION OF PERICYSTIC CAVITY AND OMENTOPLASTY IN HYDATID DISEASE OF LIVER. Khan,S.H. and Khaliq, T. J.Pak.Instit.Med.Sc., 1990;1:25-26.

Ten patients with hepatic hydatid disease were subjected to surgery. They ranged in age from 30 to 60 years and there were 7 females and 3 males. The most common symptom was pain and discomfort in the right hypochondrium. Diagnosis was confirmed by ultrasonography, isotope hepatic scan and serology. CT scan was done in one case. 7 cases had the cyst in the right lobe of the liver, 2 in the left lobe and one had multiple cysts. 9 cases had a positive complement fixation serological test. The patients were treated either by simple enucleation or enucleation and omentoplasty. The former technique caused a hospital stay of an average of 16 days. 3 cases had bile leaks closing spontaneously. 2 patients had gross wound sepsis requiring drainage and secondary suturing. 4 cases had infection along the drain and one developed cholangitis requiring antibiotics. The second group of cases undergoing enucleation and omentoplasty had a small bile leak and one had a wound infection which was treated with antibiotics. Large hydatid cysts of the liver require surgical treatment. The presented series of cases were managed by omentoplasty and marsupialization. The technique omentoplasty reduced the hospital stay and incidence of biliary fistula.