Abstracts from The Journals of The East

Pages with reference to book, From 286 To 287

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

Effect of Ocimum Sanctum and Chiorpropamide on Pancreatic Islets of Diabetic Rats. Borhanuddin, Choudhury, S., Badaruddin, Khatun, F., Ahmcd, K. Specialist, Pak.J. Med. Sci. 1993;9:265-267.

The hypoglycaemic effect of ocimum sanctum (tulsi) and the histological changes in the pancreas caused by it, was studied on 47 Norwegian Long Evans rats. The animals were of both sexes, 2 to 3 months old, weighing 150-300 Grams. They were caged in threes under natural conditions and given rat pillets as food and water ad libitum. Ocimum sanctum leaf extract was prepared as 100% solution. All the rats were made diabetic by intraperitoneal alloxan administration in a single dose of 150 mg/kg body weight. They were divided into 4 gmups each receiving distilled water (A), Ocinum sanctum extract (B), Chiorpropamide (C) or a combination of chlorpropamide and ociumm sanctum (D) respectively daily for 15 days. On the 16th day all the animals were sacrificed by decapitation under light ether anaesthesia. The pancreas was dissected out, preserved, processed and sections cut and stained. Both A and B cells were counted from 10 randomly selected islets of Langerhans from each group. A significant increase in the pancreatic weight was observed in groups C and D. Group D showed a decrease in the number of A- cells whereas the B-cell count increased in groups B and D. A granular hypertrophy of B-cells was noted in groups C and D. It was marked that chlorproparnide stimulates B-cells which was proved by the increase in weight of the pancreas and agranular hypertrophy in Group C. The group on ocimum sanctum showed a significant increase in B-cells count proving the proliferative effect. Another study where the herb was discontinued after 15 days administration, showed a persistent effect suggesting regeneration of the cells. It was thus concluded that ocirnurn sanctum works by regenerating B-cells whereas chiorproparnide stimulates B-cells of the pancreas.

Parenteral Antibiotic Before and During Surgery can Prevent Post- Operative Infection. All, M. N., Sartaj, F., Mohammad, F. Durrani, A. J. Pak. Instit. Mcd. Sci. 1993;4:211-213.

A prospective randomized open study was conducted on 296 cases undergoing clean surgeiy, to assess the benefits of prophylactic antibiotics. There were 190 males and 106 females with the age range being 5 to 70 years. Appendicectomy was performed inS! cases, 22 had anal surgery and other clean surgery, ashernia repair, renal stones cholecystectomies, other genitourinary operations and mastectomies constituting the remaining cases. The antibiotic was selected depending on the organism likely to contaminate the operative site. A loading dose of the antibiotic was givenjust before the anaesthesia and the second one 6 hours post-operatively. The wound was examined for the presence of infection 48 hours after surgery, at discharge from hospital and after six weeks in the out patients clinic. One patient with hernia repair developed superficial infection. Two subjects had to continue with antibiotics and 29 cases were febrile without any signs of infection. Antibiotic administration in clean surgery is controversial, chemoprophylaxis is recommended for clean contaminated cases. The first dose of the drug produces a blood level to combat any implanted organism during the surgical procedure. This defence is boosted by the second dose 6 hours later. Proper sterilization cannot be replaced by antibiotics. ,The low rate of 1% infection in the presented series is due to strict sterilization techniques, proper timing of chemoprophylaxis. Microorganisms Causing Urinary Tract Infection and Their Antimicrobial Sensitivities. Yousuf, M., Ahmed, M., Khan, H. H., Yousuf, N. Pak. J. Med. Res. 1993;32:294-296. Midstream and catheter urine specimens were collected in the various departments of Bahawal Victoria Hospital, Bahawalpur over a period of one year, January to December 1989. Specimens with significant bacteriuria (105/mi) were cultured on CLED and MacConkey\'s media.

Antimicrobial sensitivities were deternuned for 26 antibiotics by Stokes and Waterworth's method. The most common pathogen causing urinary tract infection accounting for 58.5% of the 680 with significant bacteriuna, was escherichia coil. It was observed that most of the pathogens were resistant to ampicillin, amoxycillin, cotrimoxazole and trirnethoprirn. Pseudomonas aeruginosa was the next infrequency (15.3%) and two of its isolates were resistant to all the antirnicrobials. The high degree of resistance to the commonly used antibiotics indicated their indiscriminate use due to their easy availability over the counter. The presented study gave a figure of 84% which compares well with 82% resistance to enterobacteriaceae, in studies from India, 77% in Saudi Arabia and 79% in Kuwait. The strict prescribing rules in United Kingdoms, brings down the figures to 21.6 percent. It was thus recommended, to perform urinary instrumentation only when strictly needed and with an aseptic technique. Antibiotics should be sold only by doctor's prescription and used with the support of urinary culture studies. Health education for the general public will avoid indiscriminate use of antibiotics and large scale studies in various institutions will help to identify the changing pattern of microorganisms and their antimicrobial sensitivities.

Duplex Ultrasound of Extracranial Carotid Artery in a Male Patient of Takayasu's Arteritis A Case Report. Wang, H. T. J., Chou, Y. H., Teng, M. M. H., Chang, T. Chin. Med. J. (Taipei) 1994;53:243-247.

Takayasu's arteritis is a chronic inflammatory disease of arteries with an uncertain etiology. The aorta and its major branches are mostly involved. The case of a 26 years old male patient is presented where Duplex Doppler Ultrasound (DUS) clearly demonstrated the vessel wall changes of the extracranial carotid artery and provided its haemodynarnic data. The patient gave a history of headache and afternoon fever for the last one and a half years. Antibiotics and antituberculous therapy provided no relief. High dose steroids proved beneficial but had to be discontinued due to development of Cushing's Syndrome. On the first admission he was diagnosed as juvenile rehurnatoictarthntis on the basis of joint swelling on the limbs. He was re-admitted after 6 months with symptoms of fever, weakness and neck pain. Soft tissue tenderness on both sides of the carotid arteries was noted. Carotid bruit and thrills were also present. The peripheral pulses were normal. The laboratory tests gave a nornml blood picture with an ESR of 128 mm/hour. The CRP, C3 and C4 were raised with a negative ANA. Left ventricular hypertrophy was noted on the ECG. Intra-arterial subtraction angiography of the neck and intra-cranial arteries showed decreased calibre of the common carotid artery (CCA) and internal carotid artery (ICA) with the left being more severe. The intracranial branches of the ICA and vertebrobasilar artery bilaterally were well preserved. The picture fitted in Takayasu's arteritis. Duplex doppler ultrasound was carried out and bilateral extracranial carotid arteries were visualized.. Luniinal stenösis of CCA was identified. The adventitia was markedly thickened and the changes extended upward showing long segment stenosis. Features of reduced systolic upslope, low diastolic velocity and spectral broadening alongwith the angiography findings gave a diagnosis of Takayasu's arteritis. Prednisolone therapy was instituted which resolved the symptoms. This was followed with steroid pulse therapy and immunosuppressive drugs. Duplex doppler ultrasound is a convenient, non-invasive and highly diagnostic tool for detecting vessel pathology and for monitoring the therapy response.