the subsequent continuous stimulation of the parasymphathetic nervous system with undesirable symptoms. Serum cholinesterase activity determination is of utmost importance in Liver disease diagnosis, Organophosphate Insecticide Poisoning, Low Albumin Levels and Trichinosis (Trichinella spiralis). CM. Cellulose was first treated with HCl and next equilibrated with sodium acetate. This was followed by column chromatography at pH 7.5.

Bungarous Coeruleus Venom was loaded on the column using sodium acetate and finally eluted using HCl in a linear gradient system at 0°-4°C. Three distinctly separated peaks were obtained. Bulk of Cholinesterase was isolated in peak I and was estimated quantitatively by the method Kramer and Gamson. Fold purification of Cholinesterase increased at 0°-4°C by this method.

054 SERUM HYDROXYPROLINE LEVELS IN SUBTYPES OF LEPROSY : *JOSEPH GEORGE, N. VENKATESAN* and *GOWRI CHANDRAKASAN*

Department of Biochemistry, Central Leather Research Institute, Adyar, Madras-600 020.

Serum hydroxyproline levels were studied in 85 healthy controls, 42 cases of borderline tuberculoid (BT), 33 cases of borderline lepromatous (BL), 115 cases of lepromatous (LL) leprosy patients and 16 cases of LL with severe erythema modosum leprosum (ENL) reaction. A significant increase in serum hydroxyproline were noticed in LL patients and LL with ENL reaction. The difference was not significant in BTY and BL cases. The maximum levels of serum hydroxyproline were observed in LL cases with ENL reaction. The increase in serum hydroxyproline levels in LL and ENL cases may be due to the intense multidrug therapy which includes Rifampicin, a hepatotoxic drug leading to connective tissue breakdown and simultaneous increase of serum hydroxyproline.

055 BIOMOLECULES INFLUENCING *IN VITRO* MINERALIZATION FROM HUMAN SERUM : *RENU GUPTA* and *R. K. JETHI*

Biochemistry Department, Panjab University, Chandigarh.

Studies by various workers have shown that normal human beings excrete polypeptides in their urine which are potent inhibitors of mineralization and significant differences exist between normal persons and kidney stone patients with respect to these urinary inhibitors. For the present studies standard biochemical techniques (e.g. dialysis, ion exchange and molecular sieve chromatographic procedures, FPLC) have been employed to isolate, purify and compare the polypeptide inhibitory biomolecules present in the serum of normal human beings and kidney stone patients. *In vitro* homogeneous and heterogeneous systems of mineralization have been used to assay their inhibitory potencies. These studies revealed that based upon their molecular weights the inhibitory biomolecules can be classified into three categories, having molecular weights <2000, between 2000-13000 and >13000. Both qualitative and quantitative differences have been found to exist between the serum of normal persons and kidney stone patients with respect to only 2000-13000 molecular weights inhibitors.

056 BIOCHEMICAL STUDIES ON THE EFFECT OF TREATMENT OF MICE BEARING EHRLICH ASCITES CARCINOMA (E.A.C.) WITH DIOSPYRIN AND ITS SYNTHETIC DERIVATIVES : *BANASRI HAZRA, SAMPA PAL* and *AMALENDU BANERJEE, *RATNAMALA RAY* and *ANITA RAY.*

Department of Pharmacy and Chemistry, Jadavpur University, Calcutta-700 032, India; *390B, Jodhpur Park, Ashok Laboratory, Calcutta-700 068.

The process of tumour progression causes a multitude of biochemical and pathological changes in the host system which might serve as markers of the diseased state. Thus, it was observed