

Synthesis and Evaluation of Some New Psychotic Polymeric Drugs.

ABSTRACT

Microparticles polymer contain anti-psychotic drugs were prepared for oral delivery system. Chlorpromazine hydrochloride, Carbamazepine and Valproic acid were used in this study. Chitin and gelatin cross linked with glutaraldehyde was prepared as microparticles. Also both chitin and tetramethylol urea were used to prepared polymer prodrug of Valproic acid. All the polymeric drug were subjected to various physicochemical studies, such as Fourier Transform Infra-Red spectroscopy (FT-IR). Physical state of drug in the microparticles was determinate by Differential Scanning Calorimetry (DSC). In vitro drug release indicated, the possibility to design a controlled drug delivery system for the prolonged release of drugs. Generally 50% of the drugs were released after 30 min, therefore its improving therapy by possible reduction of the time intervals between administrations.

Keywords: anti-psychotic drugs, microparticles, polymeric prodrugs.