

Effect of liver failure on the pharmacokinetics of cyclophosphamide

Juma, FD

<http://hinari-gw.who.int/whalecomwww.ncbi.nlm.nih.gov/whalecom0/pubmed/6468474>

<http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/31242>

Date: 1984

Abstract:

The pharmacokinetics of cyclophosphamide was investigated in 7 patients in severe liver failure. The pharmacokinetic data were compared with those derived from a matched control group of patients with normal liver function. The half-life ($t_{1/2}$) of cyclophosphamide following intravenous administration in patients with liver failure was 12.5 ± 1.0 h (m \pm SD), which was significantly longer than in the normal controls in whom it was 7.6 ± 1.4 h (p less than 0.001). The mean total body clearance (Cl_t) was significantly smaller in liver failure at 44.8 ± 8.61 X kg⁻¹ than in the controls in whom it was 63.0 ± 7.61 X kg⁻¹ (p less than 0.01). It is concluded that severe liver disease has a significant effect on the disposition of cyclophosphamide, and that it could lead to accumulation of the drug in the body.