Profil teofilin dalam plasma dan urine setelah pemberian kapsul teofilin 300 Mg

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Abstrak

Telah dilakukan penelitian tentang profile teofilin dalam plasma dan urine setelah pemberian.peroral ka psul teofilin yang berisi 300 my teofilin..
Penelitian tersebut dilakukan terhada p 12 orang sukarelawan yang sehat, berat badan berkisar antara 47 sampal 58 kg. umur berkisar antara 17 sam pai 28 tahun. Pengambilan darah dilakukan sebelum obat diberikan, 60, 120, 180, 240, 360, 480 menit setelah ohat diminum. Urine dikump ulkan pada interval waktu tertentu selama 48 jam. Konsentrasi teofilin daiarn plasma dan urine ditetapkan secara spektr ofotometri.
Dari hasil penelitian didapatkan kadar terapi teofilin dalam plasma dapat dicapal dengan pembenian 300 my teofilin. Ada hubungan antara profil teofilin dalam plasma dan urine dimana waktu untuk mencapai ekskresi puncak.teofilin dalam urine sama dengan waktu untuk mencapai kadar puncak teofilin dalam plasma pada t mid. Juga diperoleh parameter-parameter farmakokinetik seperti waktu oaruh teofilin (1 1/2), tetapan kece patan eliminasi (Ke), tetapankecepatan abbsorpsi (Ka) dan ekskresi teofilin dalam urine kumulatif.
.....The studies of theophylline profile in plasma and urine after given theophylline orally capsule which contain 300 mg theophylline - has been carried out.
The studies involved twelve healthy male volunteers, the range of body weight are beetwen 47 to 58 kg and the ages are between 17 to 28 years old. Blood samples were taken right before the drug was administered and 60, 120, 180, 240, 360, 480 minutes after that.
Urine samples were collected at regular intervals over 48 hour periods. The concentration of theophylline in plasma and urine samples were determined by spectrophotometric method.
From the data obtained, we observed that the therapeutic concentration of theophylline was reached after given 300 mg theophylline. There was relationship between theophylline profile in plasma and urine, in which the time needed to reach the maximum theophylline excreation in urine was same as the time needed to reach the maximum theophylline plasma concentration at t mid. From the data

we also observed the pharmacokinetic parameters as the half ii:fe-(T1/2) elimination rate constant (Ke), absorption rate constant (Ke) and cumulative urinary excretion.