Pharmacokinetics of temazepam in male surgical patients

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Abstract:

The pharmacokinetics of temazepam, the 3-hydroxy1 derivative of diazepam, were studied in nine male surgical patients (age: 28-57 years; weight: 55-87 kg) who had ingested single 40 mg doses, 4 hours prior to minor surgical procedures. Peak plasma temazepam concentrations were achieved rapidly (within 1 h post drug administration) and the estimated volume of distribution (mean: 1.13 l/kg), total clearance (mean: 1.6 ml/min/kg) and terminal elimination half-life (mean: 8 hours) were comparable to previously reported values in healthy subjects. There was no correlation between volume of distribution and either weight or age, and between clearance and age. These findings are broadly consistent with previous reports from studies in healthy subjects. Temazepam can therefore be used as a premedicant in patients requiring minor surgery; the concomitant anaesthetic agents administered and the surgical procedures have no effects on temazepam pharmacokinetics.