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INFLUENCE OF CHOLIC ACID ON DRUG DISSOLUTION



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Influence of cholic acid on dissolution of the varied acid-base drugs in the form of physical and glass mixture into dissolution medium pH 1.30 and 7.60 at 37 C was studied. The six selected drugs were Chlorpropamide, Sulfamethoxazole, Haloperidol, Perphenazine, Griseofulvin and Menadione.

As the result from the experiment, the release of the drugs from their respective physical mixture was controlled by the composition of cholic acid and drug components in the solid surface and the micellar solubilizing nature of ionized form of cholic acid, while the release of the drugs from their cholic acid-drug glass mixture was governed by the cholic acid-drug and cholic acid-cholic acid interaction in the form of hydrogen bonding and salt formation. The spectrum from infrared spectrophotometer could be confirmed these consideration.



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ABBREVIATION

r.p.m.	revolution per minute
pKa	reciprocal logarithm of dissociation constant
°C	degree celsius
mg	milligram
mL	milliliter
mm	millimeter
nm	nanometer
cm	centimeter
cm ⁻¹	reciprocal centimeter
ug/mL	microgram per milliliter
min	minute
psi	pound per square inch