

Mixed function oxidases in kidney and duodenum of camel, guinea pig and rat.

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Abstract

The activities of the drug-metabolizing enzymes, aniline 4-hydroxylase, benzphetamine N-demethylase and 7-ethoxycoumarin O-deethylase have been measured in vitro in kidneys and duodenum of camels (*Camelus dromedarius*), guinea pigs (*Cavia porcellus*) and rats (*Rattus norvegicus*). In these species, levels of hepatic microsomal parameters namely microsomal protein, cytochrome P(450), cytochrome b(5) and NADPH-cytochrome c reductase have also been determined. In general, camels seemed to have the lowest enzyme activity when compared to rats and guinea pigs. Rats showed the highest activity in NADPH-cytochrome c reductase, aniline 4-hydroxylase and ethoxycoumarin O-deethylase among these species. However, guinea pigs showed the highest enzyme activity in cytochrome P(450), cytochrome b(5) and benzphetamine N-demethylase