R E S U M O

BIODISTRIBUTION OF THE p-(BIS-CARBOXYMETHYL)-AMINOMETHETHYL CARBOXYAMINO-HIPPURIC ACID - PAHIDA

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A renal agent labeled with ^{99m}Tc and quantitatively secreted by the tubules has been sought for many years. To meet this need a PAH analog (PAHIDA) has been synthetized that yields a stable complex with ^{99m}Tc using Sn(II) reduction. This report describes biodistribution studies in rats of PAHIDA ^{99m}Tc. The compound is rapidly cleared from the blood with approximately 26% present 1 min. after the administration of the dose. The uptake dose/organ, showed that the kidneys have a selective performance in elimination. The urinary excretion is rapid with 50% in the urine after 30 min. Gastrointestinal elimination of the compound is less than 3%. Protein binding determined by TCA precipitation method is high (35% in 1 min. and 50% in 60 min.). The eritrocits binding increase in the time, arriving 10% in 60 min. The whole body analysis showed a retention of 50 and 20% of the administered dose, respectively at 30 and 60 min. after the administration dose. Rat urine analysus by ITLC chromatography suggest that the agent excreted is similar to the animals until 15 min. after the administered dose. Similar analysis of the urine after 15 min. showed a second peak that suggest the presence of PAHIDA metabolites.