

¹³¹I-19-iodocholesterol followed by rectilinear scanning appears to be a reliable method of

differentiating bilateral adrenocortical hyperplasia from unilateral adrenocortical adenoma.

Clinical Studies on the Metabolism and Plasma Protein Binding of Fluocortolone

T. KONO, T. YOSHIMI and J. ENDO

Second Division, Department of Internal Medicine and Central Clinical Laboratory, Kyoto University School of Medicine, Kyoto

Twenty μ Ci (5 mg) of 1, 2, 4-³H-fluocortolone (6 α -fluoro-16 α -methyl-1-dehydrocorticosterone) was administered orally to three normal male volunteers and radioactive substances in the blood plasma, urine and feces were analyzed for 72 hours. Total ³H and ethyl acetate extractable free ³H in the plasma reached maximum values 2 hours after the administration. ³H-fluocortolone itself in the plasma reached maximum value 2 or 3 hours after the administration, and the radioactive concentration at that time was equivalent to about 2 or 3 μ g of non-radioactive fluocortolone per 100 ml plasma. Of the administered ³H, 45-61% was excreted into urine in 24 hours, 53-64% in 48 hours, and 55-76% in 72 hours. Of the total ³H in 24 hour urine, 3-18% was in free fraction, 66-75% was in glucuronide, 2-3% was in sulfate and 9-13% was in the remainder. In one case 5% of the administered ³H was excreted into feces in 72 hours. In this feces, 61, 17, 9 and 13% of total

³H were found in free fraction, glucuronide, sulfate and remainder, respectively. Radioactive fractions or hydrolyzed fractions in 24 hour or 6 hour urine were analyzed using thin-layer or paper chromatography and radiochromatogram scanner. In the free fraction, at least 5 radioactive peaks with corresponding UV-absorbing spots were found on the chromatogram. None of them corresponded to fluocortolone itself. In the glucuronide fraction, at least 6 radioactive peaks with corresponding UV-absorbing spots were found. Two of them were considered to be fluocortolone and 11-dehydrofluocortolone. In the sulfate fraction, at least 4 radioactive peaks, three of which had corresponding UV-absorbing spots, were found. One of them was thought to be fluocortolone. One to 100 ng of non-radioactive fluocortolone reduced % binding of ³H-cortisol to CBG to a small extent, indicating slight binding of fluocortolone to CBG.

Evaluation of Portopulmonary Shunt Based on the Measurement of Aldosterone in Peripheral Plasma by a Double Isotope Dilution Method

Y. KUROKAWA, Y. KOJIMA, KOJIMA, K. SAKODA and H. AKITA

Second Department of Surgery School of Medicine, Kagoshima University, Kagoshima

Splenopneumopexy was devised as a surgical treatment for portal hypertension, especially for Budd-Chiari syndrome. And this splenopneumopexy has been proved to be an effective

procedure for portal hypertension by extensive experimental and clinical investigations.

In this paper, the effect of splenopneumopexy on the hyperaldosteronism caused by constrict-