

る肝血流量の増加と肝臓グリコーゲン含有量の増加を認めている。

しかしながら本神経切除術が肝硬変症に対しても有効かどうかを検するためには動物に肝硬変を作製して本神経切除を施行して肝循環に対する有効性を実証することが必要となる。

12kg の成犬に放射性金コロイドを約 100MC, 10 カ月間にわたり 8 回に分割静注して腹水を伴った肝硬変像を認めた。これとは別に 40~95MC の放射性金コロイドを数カ月間にわたって静注してえた種々の程度の肝線維症 8 頭の犬に肝動脈周囲神経切除を行ない、その前後の肝血流量を放射性金コロイド法で測定し肝血流量の増加の傾向を認めた。

8 頭のうちの 3 頭とさらに放射性金コロイドを 100~110MC まで追加投与したが、組織学的に肝臓の悪化所見はほとんどみられず、肝硬変症に至ったものはなかった。

ゆえに肝臓の線維化が充分進行した、完成した肝硬変には本神経切除はもちろん、あらゆる治療法も現在のところ無効と思われるが、病変があまり高度とならない時期には、本神経切除術は肝血流の増加を来したその進行を防止できると考える。

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## 19. An Application of Blood Disappearance Rate of Colloidal $^{198}\text{Au}$ to Interpretation of Photoscan of Liver.

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SINCE the appearance of a preliminary report on the "method for visualization of configuration and structure of liver" by Friedell, MacIntyre and Rajali in 1951, the scintiscanning of the liver has been greatly improved and markedly refined in both instrumental and radiopharmaceutical aspects. And the scanning is now accepted as a standard method of studying the liver of the internal architecture as the size, shape and position.

The lack, however, of diagnostic specificity of most of the scan findings such as "cold" area or "mottling" and alteration in external characteristics of the liver has undoubtedly limited the value of this new diagnostic modality.

The colloidal particulates of radiogold have also been used in the investigation of blood flow of the liver. As

early as 1952, Dobson pointed out that radioactive colloidal particulates injected into the vein are quite effectiey eliminated from the peripheral blood stream by Kupffer cells of the liver. This principle, being the rationale of scintiscanning, has been applied to measure the hepatic blood flow in both normal and cirrhotic subjects.

The disappearance rate measurements or "retention" rate study of colloidal radiogold and radioiodinated rose bengal were used in differential diagnosis of hepato-biliary disorders. Christie et al. have commented on the disappearance rate of colloidal radiogold in liver cirrhosis. These authors have found that the disappearance tended to be abnormally delayed in liver cirrhosis. Recently, the present author has carried out a control study on this subject, and has been also to confirm the observation. According to Shaldon et al. extraction of colloidal particulates becomes reduced in liver cirrhosis due to the formation of intrahepatic arteriovenous shunts.

So it appears that the disappearance rate is an excellent index of the hepatic blood flow and of the efficiency of the hepatic extraction of colloidal particulates. Furthermore, changes in the hepatic blood flow and extraction have been shown to be rather specific of certain pathophysiologic conditions by Murray et al.

質問：上田英雄 (東京大学 上田内科)

Acute viral hepatitis の回復期に  $^{198}\text{Au}$  除去率の亢進を見たことはないか。

答：朴 竜輝 急性肝炎だけについての detail study (個別研究) は致しませんでした。去年発表なされたごとく本病の各 stage における消長があるだろうと思います。

私等の経験では急性から亜急性、それから慢性型と移行するとき血中除去率がだんだんと延長するのがはっきりでています。

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## 20. シンチカメラの臨床的応用

—肝胆道系への利用—

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肝胆道系疾患を知るためには血清生化学的検査を始め