

## 20. Quantitative Radionuclide Venography for the Assessment of Patients with Superior Vena Cava Syndrome

Mahmud AM<sup>1</sup>, Teshima T<sup>2</sup>, Horikoshi M<sup>2</sup>  
and Nukiwa T<sup>1</sup>

(Department of Respiratory Oncology and Molecular Medicine, Institute of Development, Aging and Cancer<sup>1</sup>, Tohoku University, Sendai. Sendai Kousei Hospital<sup>2</sup>, Sendai)

In addition to its established role as an imaging modality, radionuclide venography may also be used for studying hemodynamic changes in patients with superior vena cava (SVC) syndrome by applying certain indices viz. transit time (TT), time of half peak count (TH), and peak count ratio (PC ratio). Using <sup>99m</sup>Tc-MAA, radionuclide venography was performed on 10 healthy subjects and 107 patients with SVC syndrome. Depending on venographic images, patients were divided into Group "P" (no collaterals or reflux, n=50), Group "J" (showing jugular venous reflux, n=20) and Group "C" (with collaterals, n=37). Values of the indices were significantly different between 3 groups of patients and normal subjects. For follow-up studies, 36 patients underwent RNV twice. Of them, 29 received specific anti-cancer therapy (Group I) and remaining 7 did not receive anti-cancer therapy (Group II) due to various contraindications. On subsequent venograms, 12 (41%) patients showed improved, one (4%) deteriorated and 16 (55%) had unchanged images in group I; on the contrary, in group II, three (43%) showed no change and four (57%) had deteriorated images. In group I, mean post-therapy values of TT and TH were significantly lower (p<0.001). Although PC ratio showed an insignificant decrement, it was well correlated with the status of collateral change. We conclude that study of images alone does not provide sufficient information on sequential venography; therefore, these indices are useful for the study of hemodynamic changes in patients with SVC syndrome, and provide additional information for their post-therapy evaluation.

## 21. 胸部 X 線上間質性陰影を呈した症例の <sup>67</sup>Ga シンチ

星 宏治 (太田記念病院・放)  
藤田 徹夫 佐々木幹人 佐藤 善二  
藤田 悠治 宗像 志朗 橋本 政広  
(太田西ノ内病院・放)  
太田 隆 松浦 圭文 (同・呼内)

1994年1月から1997年1月の間に、X線像にて間質性変化を示し、胸部Gaシンチを行った症例について、疾患名、Gaの集積程度等を検討した。対象総数は29例で、内訳では強皮症2例(Ga陽性は1例)、珪肺2例(ともにGa陽性)、サルコイドーシス2例(ともにGa陽性)、特発性間質性肺炎23例(Ga陽性者は16例:69.6%)であった。珪肺とサルコイドーシスでは均一なGa集積を示したが、特発性間質性肺炎では集積の不均一例が多くほとんどの例が軽度か微弱であった。また、特発性間質性肺炎については臨床検査値等との関係についても検討した。

## 22. 二次性副甲状腺機能亢進症のシンチ

田澤 聡 後藤 靖雄 長友 洋子  
(仙台社会保険病院・放)

過去2年間に二次性副甲状腺機能亢進症で術前2か月以内に副甲状腺シンチを施行した32例32検査(術後再発2, 持続5例を含む)17~64(48.0)歳, 透析歴1~24(8.1)年を対象とし感度を調べた。副甲状腺シンチは収集35分前に<sup>99m</sup>TcO<sub>4</sub><sup>-</sup> 300 MBqを, 3分前に<sup>201</sup>TlCl 74 MBqの二核種を投与し同時収集した。術後再発2, 持続5例および甲状腺疾患部を除いた24例94腺の感度は0.77と良好でPPVも0.92であった。その診断には甲状腺のチェック, サブトラ係数の増減が肝要でカラーマップも一助となった。腺重量と感度では1g以上は100%で小さいものほど低下, 腺重量とHS-PTHとは相関係数0.75と良い相関を示し, 部位別感度では上2腺が下2腺に比しやや悪かった。