

symptoms suggest that a screening method as well as a high level of suspicion for PE is important. And combined radionuclide venography and lung perfusion scan seems a reasonable approach for patients suspected of DVT in order to evaluate the possibility of pulmonary embolism.

16. Scintigraphic Measurement of the Changes of Pulmonary Vasculature in Korean Hemorrhagic Fever

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Pulmonary vascularity and vascular permeability have been thought to vary according to the disease course of Korean hemorrhagic fever (KHF), and the extreme change of these variables might lead to the fatal outcome among the most severely ill patients. We adopted radiolabelled albumin cinescintigraphy which had been applied for the the evaluation of the adult respiratory distress syndrome with permeability edema, and tried to assess the changes of pulmonary vasculature in KHF.

In 10 patients, sequentially in 7 patients, we performed lung and heart cinescintigraphy with ^{99m}Tc albumin and acquired the curves of density ratios for the selected regions of interests; heart, lungs and liver. We took the density ratio of lung-to-heart and that of liver-to-heart at 20 minutes after the albumin injection for an index reflecting pulmonary and hepatic blood volumes respectively. We considered the density ratio changes (represented by the slopes of the curves) of the lungs and the liver between 20 and 50 minutes as another index reflecting vascular permeability.

Density ratios of lung-to-heart and liver-to-heart taken during late phases of Korean hemorrhagic fever tended to aggregate near the value of 0.5 and 0.7 respectively. Density ratios of lung-to-heart ran-

ged between 0.37 and 2.0 and these ratios increased to 2.0 from just after the hypotensive phase till late oliguric phase and then tended to decrease. Density ratios of the liver-to-heart ranged between 0.54 and 2.3 and showed the same pattern of changes as that of the lungs.

The slopes of the lungs representing the tidal changes of the density ratios ranged between 2.9×10^{-2} and -3.99×10^{-2} . The curves of lung-to-heart in the initial phases of KHF showed positive deflection during and even after the hypotensive phase. 4 among 23 images showed these findings. During the oliguric period after hypotensive phase, the curves showed negative deflection, which at last recovered their flatness at the later period. Beginning to come to zero just after the hypotensive phase in a few cases, the slopes were nearly null in most cases late at diuretic phase. The slopes of liver-to-heart ranged between 3.3×10^{-2} and -5.3×10^{-2} . The general tendency of the changes was the same as those of the lungs, but the amplitude of the variations seemed larger.

We could find that radiolabelled albumin cinescintigraphy reflected the variably changing features of pulmonary vasculature. It was concluded that pulmonary vascular permeability was increased at the early phases in some patients with KHF and the pulmonary blood volume was increased at the later period before normalization.

17. 심근경색증에서 ^{99m}Tc - MIBI 심장 스캔의 임상적 평가

서울의대 내과

김명아 · 고은미 · 손대원 · 오병희
이명철 · 박영배 · 최윤식
서정돈 · 이영우 · 고창순

Technetium- 99m Methoxy Isobutyl Isonitrile (^{99m}Tc -MIBI)는 심근의 관류 스캔을 할 수 있는 새로운 방사성 의약품으로 배후 방사능 및 연조직에서의 광량자 흡수가 낮아 보다 좋은 영상을 얻을 수 있다. 저자들은 관동맥 질환에 ^{99m}Tc MIBI의 사용 가능성을 평가하