

## **The Use of Nuclear Angiocardigraphy in the Diagnosis of Congenital Heart Disease in Infancy**

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Although nuclear angiocardigraphy is a non-invasive procedure applicable to a critically ill infant, its usefulness for definitive anatomical diagnosis has been seriously questioned because of poor visualization.

Therefore we undertook the present study to determine whether the following technical modification may provide clinically useful information in evaluating cyanotic infants of the various causes. It consisted of 1) intravenous injection of Pertech-netate as bolus, 2) use of D-V collimeter, and 3)

introduction of modified software program; level cutting,  $128 \times 128$  beampoints, and zooming.

Fourty children aged from 2 days to 1 year were studied. Most of them were cyanotic and in severe respiratory distress at the time of the study.

Results were as follows, definite anatomical diagnosis was established in 34 of 38 children with congenital heart disease and 2 children were correctly diagnosed as having no significant heart disease.

## **Computer Processed Myocardial Scintigraphy and Its Clinical Application: Diagnosis of Idiopathic Cardiomyopathy**

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In this study, myocardial scintigraphic findings were compared with clinical and pathologic findings in 27 cases of idiopathic cardiomyopathy, using a computeraided scintigraphy.

Myocardial scintigraphy with 1 mCi of Cs-131 was performed in 7 healthy subjects, 17 cases of hypertrophic cardiomyopathy (HCM) and 10 cases of congestive cardiomyopathy (CCM).

In order to enhance the myocardial area of low uptake, scintigrams were reconstructed as binary images with stepwise increase of threshold level of count. In cases of CCM, a sparse pattern was clearly observed. This pattern was attributed to the diffuse fibrotic change of the myocardium at autopsy. In cases of HCM, no sparse pattern was observed at any threshold level. Mean count of