dition is an angle of 60 degrees between two detectors and a clearance of 3 cm from the collimators to body surface. In our opinion, laminoscanning is so far not beyond experimental stage but must be practical sooner or later and there remain several problems for further improvement.

Isosensitive Scintiscanning with MUHC

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Since in conventional scanning a layer of a few centimeters from surface of the human body is scanned which has a thickness of about 20 cm, conventional scanning is suitable for the superficial organ e.g. thyroid gland, but is unsuitable for the thick organ such as the lung, liver and head. And it is also unsuitable for either multi-nuclide scintiscanning, lateral scanning of the liver in the near future or quantative evaluation of pulmonary blood flow by lung scan. For this reason, isosensitive secintiscanning is needed.

In developing Medical Universal Human Counter (MUHC), a concept of isosensitive scintiscanning was introduced. Suppose a thickness of the human body is 20 cm, it is necessary for isosensitive scanning to use a combination of two opposed scintillation detectors employing 3 in. diameter by 2 in. thick NaI crystals having a clearance of 5 cm above and below the humanbody. These two detectors are moved in a scan motion together. Isosensitive scanning was carried out successfully in the liver phantom and the human body. As compared with conventional scan, isosensitive scan improves the accuracy of detecting deep-situated abnormality in human body. Since isosensiteve scanning can detect radioactivities in any layer of the thick organ e.g. the lung, liver and head sharply, and a isosinsitive scintigram is more clearly demonstrated than a conventional scintigram, one can reduce a risk of overlooking the abnormality. Besides, as two detectors are employed in the isosensitive scan, the amount of isotope required can be reduced.

A Rescanner with Polaroid Color

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The purpose of this instrument is to extract latent information in the record of radioisotope scanning. The original scan taken by the routine technique is placed between a small light source and a light sensor of the rescanner and is scanned. The output of the sensor drives a color wheel with the aid of the DC servomotor and selects a color filter. An optical position-feedback mechanism quickly decides the balancing point where the color wheel must stop. The angular displacement of the color wheel is proportional

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