O. Bone and Joints

Diagnostic Scignificance of Computer Scintigrams for Bone Diseases

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Purpose: It is the purpose of this study to try image processing of bone scintigrams usirg clinical data system on-line and to utilize them clinical diagnosis.

Method: The state of RI accumulation at the affected site and normal site immediately after i.v. injection was recorded with data store playback accessory using Pho/Gamma scinticamera. After 3 hours, miniscan and life size scan of the affected were carried out with whole body scanner, model scc-750w. Concerning these data, various programs for image processing and for image display were investigated using SCINTIPAC-200 through image interface on-line.

Result: (1) By using local program for processing a histgram, it is possible to analyze numerically the change of RI accumulation with time at the affected site and normal site and to assess condition of diseases.

(2) As image display programs effective to the diagnosis of the bone diseases the followings were investigated: MAP display, isocount line display, profile display, etc. It is considered that they are all of useful help to find out smaller lisions of bone diseases and to measu re RI distribution quantitatively and contribute to the improvement of the accuracy of diagnosis.

Experiences of Bone Scanning with Tc-99m-diphosphonate

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About 55 various bone disease caces, we took bone scanning with Tc-99m-diphosphonate.