

SCINTIMETRIC CHARACTERIZATION OF SKELETAL HOT SPOTS IN PAGET'S DISEASE

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The bone scan findings of the Paget's disease are well established and documented and considered to be the hall mark findings of the disease. It usually presents as asymmetrical, diffuse and dense skeletal hot spots with irregular margins. It is characterized by the typical flame appearance of the marrow involvement. The earliest attempt to characterize the hot spots by means of the triple phase bone scan is by dynamic curve analysis. That is done by calculating the blood pool ratio and the skeletal ratio. No useful clinical application could be derived due to the cumbersome process. Hence in five cases of Paget's disease that encountered in our case collection the scintimetric characterization of the skeletal hot spots by Dr V Siva's retention ratio is applied. The triple phase bone scan is followed by 24 hr repeat whole body bone scan from the time of radiopharmaceutical injection. The maximum counts at the focal hotspots in 4 hr and 24 hr images are obtained using region ratio protocol and tabulated. The Dr V Siva's retention ratio is calculated by dividing the 4 hr counts by 24 counts. Fig.1 shows the sample image of scintimetric characterization in a case of Paget's disease. All the cases showed plethora of values ranging from 1 to 30 defying the cut off values of benign, degenerative and neoplastic categories. Thus the Paget's disease is a water loo for the Dr V Siva's retention ratio and the cause for it is elaborated.

Biography

V Siva Subramaniyan is a Doctoral Research Scholar pursuing his research in the area of Scintimetric characterization in the University SSSIHL, Prasanthinilayam under the guidance of Prof K Venkataramaniah. He is a Senior Radiologist, Consultant Nuclear Medicine Physician and Imaging Specialist. He was awarded Dr Ashok Mukherjee Gold Medal for the best young Radiologist of the country in the year 1999 for his research work by the Indian Radiological and Imaging Association-IRIA. He was invited to present his research work as poster in the IPET 2015 organized by IAEA at Vienna. He is pursuing his research and academic work. He has delivered more than 75 presentations, 9 thesis guidance and 10 publications to his credit.

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