

The role of technetium-99m-HMPAO-labeled WBC scintigraphy in the diagnosis of orbital cellulitis

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Bacterial orbital cellulitis is an infection of the soft tissues behind the orbital septum. Cellulitis is seen as a poorly defined area of increased CT density or T2 signal intensity within the fat. There is an amorphous enhancement following contrast infusion. Radiolabeled leukocytes or granulocytes are now established widely as a means of localizing various forms of inflammatory disease and infections. We report a case of orbital cellulitis detected with Tc-99m-HMPAO-labeled WBC scintigraphy and three-phase bone scintigraphy. Tc-99m-HMPAO-labeled WBC scintigraphy was superior to bone scintigraphy in delineating the extension and limits of the infectious process in the orbita. Tc-99m-HMPAO-labeled WBC scintigraphy is appropriate in the investigation of such infectious lesions, leading to early diagnosis and therapy to avoid severe complications.

Key words: cellulitis, orbita, Tc-99m-HMPAO-labeled WBC scintigraphy