

## Tc-99m RBC perfusion and blood-pool scintigraphy in the evaluation of vascular leiomyoma of the hand

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A 62-year-old man with a soft, non-tender, movable mass  $2.5 \times 2.5$ -cm in diameter in the volar surface of the right index finger over the proximal phalanx underwent Tc-99m RBC perfusion and blood-pool scintigraphy to evaluate the vascular nature and extent of the mass. Highly increased activity on early and delayed blood-pool images with increased perfusion was demonstrated in the mass. The lesion with high flow rates and large blood pool spaces was considered highly suggestive of one of the various types of peripheral hemangioma. Angiography revealed a vascular neoplasm with tumor vessels. Microscopic examination of the resected tumor revealed vascular leiomyoma containing numerous dilated vascular channels. These scintigraphic abnormalities were regarded as resulting from hypervascularity demonstrated angiographically and blood pooling within the dilated vascular channels demonstrated histologically. It is concluded that Tc-99m RBC perfusion and blood pool scintigraphy may be an important non-invasive approach to demonstrate vascular leiomyoma prior to surgical biopsy or resection.

**Key words:** vascular leiomyoma, hemangioma, Tc-99m RBC scintigraphy