## عنوان مقاله:

Comparison of Methoxyisobutylisonitrile Scintigraphy and Ultrasonography in Preoperative Localization of Secondary Hyperparathyroidism


## محل انتشار:

مجله علمی جراحی, دوره 1, شماره 1 (سال: 1393)

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## خلاصه مقاله:

Background: In patients with secondary hyperparathyroidism, the four glands are not uniformly enlarged;therefore, preoperative localization is difficult in comparison with primary hyperparathyroidism. The aim ofthis study was to compare the usefulness of 99mTc-sestamibi scintigraphy versus ultrasonography in thepreoperative assessment of patients with secondary hyperparathyroidism. Methods: Between October 2008 and March 2012, 25 uremic patients with secondary hyperparathyroidismunderwent 99mTc-sestamibi scintigraphy and high resolution ultrasonography before total or subtotalparathyroidectomy. We measured plasma concentration of intact parathyroid hormone (PTH), calcium, phosphorus, and alkaline phosphatase (ALP) before parathyroidectomy.Results: Sensitivity and positive predictive value (PPV), respectively, were 47.3% and 97.8% for MIBIscintigraphy, and 69.5% and 96.9% for ultrasonography. The sensitivity of combined techniques was 84.2%. There was a positive correlation between the parathyroid glands' weight and serum calcium level, and positive MIBI scintigraphy and ultrasonography results. However, there was no correlation between the preoperativeserum PTH, phosphorus, alkaline phosphatase (ALP), dialysis duration, and parathyroid glands' weight.Conclusion: Ultrasonography is a reliable non-invasive localization tool. It has greater sensitivity in localizing parathyroid glands in secondary hyperparathyroidism than scintigraphy.


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## کلمات کلیدی:

MIBI scintigraphy, Ultrasonography, Secondary hyperparathyroidism