

## Minimally invasive radio-guided surgery for hyperparathyroidism: An experience with Tc-99m sestamibi

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### Abstract

**Introduction:** Radio-guided parathyroid surgery along with other minimally invasive surgeries constitutes the main surgical treatment procedures for different kinds of hyperparathyroidism. In this article we have reported our experience of radio-guided parathyroid surgery using Tc-99m sestamibi. **Methods:** Ten patients with hyperparathyroidism included in our study. Twenty mCi of Tc-99m sestamibi was injected intravenously, to the patients in the day of surgery. All patients underwent surgery 4 hours after injection of the tracer. Abnormal parathyroid glands were localized by surgical gamma probe during surgery and were removed. **Results:** Eight out of 10 patients had single adenoma. One patient had parathyroid hyperplasia secondary to chronic renal failure. The one remaining patient had persistent hyperparathyroidism with previous unsuccessful parathyroid surgeries. Except for the patient with parathyroid hyperplasia, parathyroid hormone (PTH) level of all other patients decreased after surgery including the patient with persistent hyperparathyroidism. **Conclusion:** Minimally invasive radio-guided parathyroid surgery is an easy and safe method for surgical treatment of hyperparathyroidism. With the increasing availability of surgical gamma probes and nuclear medicine facilities in Iran considering this kind of approach for surgical treatment of hyperparathyroidism seems rational.

### Author keywords

Hyperparathyroidism; Minimally invasive radio-guided surgery; Parathyroid adenoma parathyroid hyperplasia; Tc-99m sestamibi

### Indexed Keywords

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