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Radioguided surgery in primary hyperparathyroidism

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Surgical neck exploration is usually made in primary hyperparathyroidism (PHPT). Localization of the adenoma or detection of hyperplasia may reduce the operation period and limit the extent of the surgery. In this study the effficacy of preoperative Tc-99m MIBI scintigraphy and intraoperative gamma probe was evaluated. ***Materials and Methods:*** Six patients with PHPT had preoperative Tc-99m MIBI parathyroid scintigraphy and intraoperative gamma probe (IGP) was used in surgical neck exploration. ***Results:*** Parathyroid adenoma was observed in 2/6 patients on scintigraphy in the right retroclavicular region and the left lobe of the thyroid. Both of them were clearly detected by IGP during the surgery and easily removed by the surgeon in a short time (35 min) with a small incision. Pathologic examination confirmed the parathyroid adenoma. No abnormal MIBI uptake was not observed in scintigraphy in 4/6 patients. Subtotal parathyroidectomy was performed in these patients. ***Conclusion:*** Preoperative Tc-99m MIBI scintigraphy and the use of IGP may limit the exploration and also the operation time and reduce surgical complications.

Key words: Tc-99m MIBI, parathyroid adenoma, intraoperative gamma probe