

ONE-GLAND EXPLORATION FOR MEDIASTINAL PARATHYROID ADENOMAS: CERVICAL AND THORACOSCOPIC APPROACH

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Background: In patients with sporadic primary hyperparathyroidism (PHPT), preoperative localization studies may discover a solitary mediastinal parathyroid adenoma (MPA).

Hypothesis: In this circumstance a one-gland mediastinal exploration (1-GME), either cervical or thoracoscopic, is indicated.

Study Design: In an 18 month period 5 of 110 consecutive patients with PHPT underwent initial 1-GME for solitary MPA and 2 patients had 1-GME for persistent HPT. Clinical presentation, imaging studies, operative techniques and outcomes are reviewed.

Results: See table. Sestamibi scans demonstrated an MPA in all 7 patients. Computed tomography (CT) provided anatomic localization of adenomas in the middle mediastinum (MM). No complications occurred. Calcium and PTH levels normalized in all patients.

Patient	Presentation	Position	Operation	Operative Time (min)	Adenoma Size (cm)	LOS (days)
63 M	bladder stones	ASM	cervical-anterior	51	3.5	0
79 F	osteopenia	ASM	cervical-anterior	25	1.8	0
71 F	osteoporosis, fatigue	PSM	cervical-"back door"	69	1.5	0
66 F	osteopenia, fatigue	PSM	cervical-"back door"	40	3.7	0
67 F	osteopenia, renal stones	MM	left thoracoscopic	81	2	1
57 M*	osteopenia, hyperthyroid	MM	right thoracoscopic	145	1.2	1
54 F*	osteoporosis	MM	left thoracoscopic	131	1.6	1

*reoperative

LOS=length of stay, ASM=anterior superior mediastinum, PSM=posterior superior mediastinum

Conclusion: PHPT due to solitary MPA can be successfully treated with 1-GME either by cervical or thoracoscopic approach as indicated by localization imaging.