

Table 1: Demographic and clinical presentation of the study group

Age:	Sex	Men (4)	Women (10)	Total (14)
	Range		44-51	25-47
Mean		47.8	38.6	
Bone manifestations (11):				
• Pathological fractures		1 (pelvis)	5 (femur)	6
• Bone cysts		1 (humerous)	2 (humerous, upper ulna)	3
• Brown tumours of the jaw		1 (uppre and lower jaws)	1 (lower jaw)	2
• Osteoporosis with gait disturbances		0	1	1
Renal manifestations:				
• Recurrent renal Stones		0	2	2
• Nephrocalcinosis		1	0	1
Gastrointestinal manifestations				
• Recurrent pancreatitis		0	1	1
• Peptic ulcer		0	1	1
Other Manifestations				
• Dehydration, apathy, confusion, and bed sores.		0	1	1

Some patients may had more than one symptom or sign.

Table 2: Pre and postoperative laboratory findings

	Pre-operative	One week post-operative	Six weeks post-operative	Six months post-operative
Serum Calcium (mMol/L)				
• Range	2.50-3.60	1.60-2.40	1.90-2.50	2.25-2.50
• Mean ± StD	3.13 ± 0.42	2.22 ± 0.21	2.27 ± 0.18	2.34 ± 0.22
*P-value		0.007†	0.05‡	0.44
Serum pTH (pg/mL)				
• Range	205-1200	23-130	23-187	27-176
• Mean ± StD	787.4 ± 256.6	47.1 ± 26.4	49.7 ± 40.2	48.6 ± 37.1
*P-value		0.001†	0.001†	0.001†

Normal value: Serum ca (2.15-2.55 mMol/L), Serum PTH(12-65 pg/mL).

*Paired T-test, †Wilcoxon Signed Ranks Test

after surgery. Recurrence was defined as a serum calcium level exceeding 2.55mmol/L in consecutive samples at 6 months after surgery.⁽¹³⁾

Statistical evaluation

Statistical calculations were performed using the SPSS for windows, release 9.1 software package, results are expressed as means \pm standard deviation and P value was considered significant if it was < 0.05 . Both Paired T-Test and Wilcoxon Signed Ranks Test were used for comparison between the preoperative and postoperative level of serum levels of calcium and PTH.

Results:

Fourteen consecutive patients were enrolled in this study. Most of them were Women (10 out of 14 (71%)). The majority of these patients were in the middle age (range from 25-51 with mean of 41.2 ± 6.9 years).

The commonest presenting features of our cases were overt bone disease in 11 cases (79%). Pathological fractures were the most dominant feature (43% of the total), all of them, but one, were in the femur. Other manifestations were listed in Table-1.

All cases showed high level of serum calcium (mean 3.13 ± 0.42 mmol/L) and parathormone hormone (mean 787.4 ± 256.6 pg/mL) (Table-2). Accuracy of ultrasound scanning of the neck was 71% in localization of parathyroid lesions, while that of CT and Sestamibi scan were 85% and 87.5% respectively.

Surgical and pathological findings were presented in table-3. A single parathyroid adenoma was the commonest lesion (86%). All patients, but two, had been followed up from 6 months to 18 months with a mean of 11 ± 4 months. The success rate was achieved in all but one (92.9 %), who had been found to be an ectopic parathyroid adenoma in the superior mediastinum. There was one case who died due to the morbid general medical condition. Postoperative temporary hypocalcaemia was observed in 2 cases. No permanent injury to RLN was reported in our cases.