

Adult Best Poster Presentation

BP_A004

CLINICAL CHARACTERISTICS AND COMPLICATIONS OF PRIMARY HYPERPARATHYROIDISM AT A TERTIARY CENTRE

<https://doi.org/10.15605/jafes.040.S1.008>

Nor Nadziroh Ibrahim, Nurain Mohd Noor, Chin Voon Tong, Rashidah Bahari, Lisa Mohamed Nor, Jia Whey Jacelyn Ong

Clinical Research Centre, Hospital Putrajaya, Putrajaya, Malaysia

INTRODUCTION

Primary hyperparathyroidism (PHPT) is the third most common endocrine disorder, following diabetes and thyroid diseases. The most common cause of PHPT is a single parathyroid adenoma, accounting for approximately 85% of cases. In this study, we describe the characteristics and complications of PHPT observed at an endocrine center.

METHODOLOGY

This cross-sectional study retrospectively reviewed data from patients diagnosed with PHPT who underwent parathyroidectomy at Hospital Putrajaya between 2012 and 2024. Relevant demographic, biochemical, clinical characteristics and complications were extracted from electronic medical records. Secondary and tertiary hyperparathyroidism were excluded.

RESULT

We studied 160 patients, of whom 65.0% were female with a median BMI of 24.5 kg/m². Nearly half were Malays (46.3%) and almost half had hypertension (48.1%). The majority (83.8%) experienced symptoms and complications, primarily renal (45.6%), skeletal (41.9%), and abdominal (31.9%). Among the renal complications, nephrolithiasis was the most common, while bone pain and osteoporosis were the most frequently reported skeletal complications. Patients underwent parathyroidectomy at a mean age of 52.2 years, either in the same year or within one year of diagnosis in 88.8% of cases. Pre-operative serum iPTH levels ranged from 3.70 to 325.40 pmol/L. The mean serum calcium levels pre-operation and six hours post-operation were 2.93 mmol/L and 2.59 mmol/L respectively ($p < 0.05$). One-third (31.3%) underwent right inferior parathyroidectomy. Adenoma was the most common tumour type, accounting for 91.8% of cases.

CONCLUSION

Primary hyperparathyroidism predominantly affects females, with most patients experiencing symptoms and complications, particularly renal and skeletal. Parathyroidectomy was performed around the age of 52, within a year of diagnosis. Adenomas were the most common tumor type, with a significant reduction in mean serum calcium level post parathyroidectomy.