CR-GE-29

T3 THYROTOXICOSIS AND SECONDARY HYPERPARATHYROIDISM IN A 21-YEAR-OLD FEMALE WITH A HISTORY OF GONADOTROPIN-INDEPENDENT PRECOCIOUS PUBERTY AND RECURRENT FRACTURES

https://doi.org/10.15605/jafes.034.02.S121

Kevin Paul Enriquez and Jerome Barrera
Zamboanga City Medical Center, Zamboanga City, Philippines

INTRODUCTION
McCune Albright syndrome (MAS), caused by an activating mutation in the Gs alpha membrane associated protein, is a condition with a prevalence of 1:100,000-1:1,000,000. Diagnosis is usually established clinically by a constellation of cafe-au-lait spots, polyostotic fibrous dysplasia, and hyperfunctioning endocrinopathies. We report a 21-year-old female with cafe-au-lait spots, history of gonadotropin-independent precocious puberty, recurrent fractures, presenting with bone pain and symptoms of hyperthyroidism.

CASE
A 21-year-old female presented with symptoms of palpitations, tremors and heat intolerance. Testing revealed T3 thyrotoxicosis (suppressed TSH, elevated fT3, normal fT4), with radiographic findings of ground-glass appearance and endosteal scalloping of the humerus, ribs, and femur characteristic of fibrous dysplasia. The presence of decreased phosphorus, total calcium, 25-OH Vitamin D, and an elevated PTH level signified associated secondary hyperparathyroidism.

CONCLUSION
T3 thyrotoxicosis and secondary hyperparathyrodisim caused by vitamin D deficiency and renal phosphate wasting are common endocrinopathies associated with MAS. Both contribute significantly to the progression of fibrous dysplasia. Management is usually palliative and no form of therapy to date affects the natural course of disease.

KEY WORDS
mccune Albright syndrome, fibrous dysplasia, t3 thyrotoxicosis

CR-GE-30

GIANT PARATHYROID ADENOMA AND PARATHYROID CANCER: A CASE SERIES AND LITERATURE REVIEW

https://doi.org/10.15605/jafes.034.02.S122

Hazwani Aziz and Zanariah Hussein
Endocrinology Unit, Medical Department Hospital Putrajaya, Malaysia

INTRODUCTION
Only <1% of cases of primary hyperparathyroidism are due to parathyroid cancer, and 85% are due to parathyroid adenoma. Giant parathyroid adenoma (GPA) is defined as adenoma larger than 3.5 g.

CASE
Twenty-one cases of parathyroid masses >3.5g in patients with primary hyperparathyroidism who underwent parathyroidectomy in Hospital Putrajaya, Malaysia from 2012 till 2019 were identified. The youngest age was 17 years old, with majority between 50 to 65 years old. Eleven cases presented with nephrolithiasis, 6 cases had osteoporosis and 2 cases were asymptomatic. Average serum calcium was 3.2 mmol/L Average iPTH was 71.5 pmol/L, with highest iPTH 176.6 pmol/L. The sizes vary from 3.5 g to 38 g. 2 cases with adenoma size of 32.4 g and 6 g and ALP 3046 U/L and 405 U/L respectively, developed hungry bone syndrome. Two cases were reported as parathyroid cancer during histopathology examination. First case presented with nephrocalcinosis and chronic pancreatitis, calcium 4.0 mmol/L, iPTH 176 pmol/L and size of 4.2 g. The second case presented with symptomatic hypercalcaemia and osteoporosis, with calcium 3.61 mmol/L, iPTH 88.2 pmol/L and size of 38 g. Another symptomatic case with calcium 2.77 mmol/L, iPTH 87.8 pmol/L and size of 6.9 g had biopsy of atypical parathyroid adenoma with capsular and perivascular invasion.

CONCLUSION
Differentiating GPA with parathyroid cancer is a challenge as it will determine further surgical intervention.

KEY WORDS
primary hyperparathyroidism, parathyroid carcinoma, parathyroid adenoma