

**PP-43****Bilateral Genu Valgum as an Unusual Presentation of Primary Hyperparathyroidism**

<https://doi.org/10.15605/jafes.034.S55>

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**INTRODUCTION**

Primary hyperparathyroidism (PHPT) is a disorder of bone and mineral metabolism caused by autonomous secretion of parathyroid hormone (PTH). The most common cause is parathyroid adenoma, followed by parathyroid hyperplasia and rarely parathyroid carcinoma. Parathyroid adenoma can occur sporadically or as part of multiple endocrine neoplasia (MEN) type 1 or type 2A. Sporadic PHPT in adolescents is uncommon and is often associated with severe symptomatic end organ damage compared to adults. The skeletal manifestations include bone pain and fractures. Limb deformity is an atypical and rare presentation.

We report a young patient with bilateral knock knee who was subsequently diagnosed to have a parathyroid adenoma.

**CASE**

A 15-year-old Malay boy presented with bilateral knock knee of six months' duration. He had no history of recurrent fractures, bone pain, abdominal pain, vomiting or constipation. There was no family history of renal calculi or MEN related disorders. Physical examination showed bilateral genu valgum deformity with short stature. He had elevated levels of serum calcium (3 mmol/L), alkaline phosphatase (1258 U/L) and intact PTH (154 pmol/L). His serum phosphate level was 0.8 mmol/L with normal renal function. Ultrasonography of the neck showed a left inferior parathyroid adenoma. Following parathyroidectomy, histopathologic examination was consistent with parathyroid adenoma. His serum calcium 2 months after surgery returned to normal (2.14 mmol/L). Genu valgum has been described as one of the skeletal manifestations of primary hyperparathyroidism in adolescents. The exact mechanism is still not understood. It can be hypothesised that elevated parathyroid hormone levels may have direct effect on the growth plates and bone remodelling during pubertal growth spurt, resulting in genu valgum. In a young patient with parathyroid adenoma, MEN-related disorders should be considered. Parathyroidectomy is the mainstay of treatment in adolescents.

**CONCLUSION**

Primary hyperparathyroidism in adolescents can present with isolated genu valgum deformity.

**PP-44****Primary Bilateral Adrenal Diffuse Large B Cell Lymphoma: A Case Report**

<https://doi.org/10.15605/jafes.034.S56>

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**INTRODUCTION**

Primary adrenal lymphoma of the adrenal gland is very rare and is identified in <1% of cases of non-Hodgkin's lymphoma. It is primarily bilateral but secondary involvement of the adrenal gland is typically unilateral. Diffuse large B cell lymphoma is the most common subtype, which represents 70% of cases.

**CASE**

We report a case of high-grade lymphoma of both adrenal glands found in a 77-year-old man. The patient was admitted to our hospital with progressively increasing pain and fullness in the right upper quadrant of his abdomen, generalised weakness and decreased appetite of 2 weeks' duration. On examination, he had a blood pressure of 140/89 mmHg with no postural drop, a pulse rate of 90 beats/minute and no fever. His past medical history was significant for diabetes mellitus, hypertension and coronary artery bypass grafting 20 years ago. Computed tomography (CT) revealed adrenal gland measurements of 7.2 cm × 7.1 cm × 7.3 cm on the right, 5.1 cm × 4.4 cm × 5.1 cm on the left, with bilateral hypodense lesions associated with perilesional fat streakiness. Further laboratory workup revealed serum Na 131 mmol/L, serum K 5 mmol/L, haemoglobin 10.8 g/dL, white blood cell count  $6.3 \times 10^3/\mu\text{L}$ , platelet count  $267 \times 10^9/\text{L}$ , erythrocyte sedimentation rate 37 mm/hour, early morning cortisol 371 nmol/L and LDH 547 U/L. The patient underwent CT-guided biopsy of the right adrenal. Histopathological test results showed a diffuse large B-cell lymphoma. Immunohistochemical stains were strongly positive for CD20 and LCA while negative for CD3, CD5, and cyclin D1. The patient's Ki67 (Mib-1) index was approximately 90%. He was referred to a haematology centre for chemotherapy.

**CONCLUSION**

Primary bilateral adrenal non-Hodgkin's lymphoma should be considered as the differential diagnosis of adrenal masses. It is extremely rare but rapidly progressive. Early diagnosis and treatment might dramatically affect the clinical outcome.