A 73-year-old Chinese male with a history of type 2 diabetes mellitus, hypertension and stage IV chronic kidney disease presented to emergency department with syncope attack and capillary blood glucose of 1.9 mmol/L. Initial examination revealed massive hepatomegaly. A 4-phase CT scan of the liver showed multicentric hepatocellular carcinoma. Biochemical investigations revealed hypoinsulinaemic hypoglycaemia, elevated alfa-fetoprotein (AFP) at 135,937 IU/mL, markedly suppressed insulin-like growth factor-1 (IGF-1) and normal IGF-2 level. The IGF-2: IGF-1 ratio was 50:1. He was started on oral prednisolone, titrated up to 25mg twice daily to maintain euglycemia. After discussion with surgical and oncology teams, patient opted for conservative management.

Elevated IGF-2 or pro-IGF-2 exerts insulin mimicking effects leading to hypoglycaemia. The diagnosis of NICTH is based on the IGF-2: IGF-1 ratio, which is higher than 10:1, along with inappropriately suppressed IGF-1. Curative treatment for NICTH is complete resection of the tumour. Glucocorticoids is important to maintain euglycemia on top of nutritional support and glucose infusion. Glucagon has a limited role as adjunct therapy. Diazoxide and octreotide were found ineffective.

CONCLUSION
This is a case of hepatoma-associated NICTH, which was managed with oral prednisolone to maintain euglycemia. Due to advanced disease, we were unable to deliver definitive treatment. High level of suspicion of NICTH is crucial in patients with recurrent hypoglycaemia on a background of malignancy.

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RENINOMA: A SURGICALLY CURABLE CAUSE OF HYPERTENSION

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INTRODUCTION/BACKGROUND
Reninoma is an extremely rare cause of hypertension. It is a tumour of the juxtaglomerular apparatus which secretes renin, leading to secondary hyperaldosteronism, ultimately causing hypertension. This disease is commonly seen in adolescents and young adults and has a female preponderance. Patients with reninoma mostly present with hypokalaemia although they can also be normokalaemic. Most reninomas are benign and surgical resection can render the patient normotensive. Here we report a case of reninoma in a young female who presented with hypertension and palpitations.

CASE
We describe a 23-year-old female who was referred for evaluation of hypertension in the young. She was found to have a BP ranging between 130-180 mmHg (systolic) and 85-120 mmHg (diastolic). She was diagnosed with hypertension and started on oral doxazocin. She complained of paroxysms of sweating with palpitations. On examination, she was a moderately built female with a body mass index of 20.4kg/m^2. Her pulse rate was 100 beats per minute and her BP was 153/100 mmHg.

Her renin levels were elevated at 518 mU/L (NV: 4.4- 46.1 mU/L) with elevated aldosterone at 998 pmol/L (NV: 61.2- 997.8 pmol/L). Computed tomography of abdomen and pelvis revealed the presence of a well encapsulated heterogeneously enhancing mass on the upper pole of the right kidney measuring 2.7 x 3.0 x 3.3 cm. A biopsy of the lesion was suggestive of a reninoma. The patient underwent a nephron-sparing surgery. Histopathological examination revealed an encapsulated lesion that stained positive for CD 34, CD 177 and vimentin, confirming the diagnosis. Following surgery, the patient was normotensive and all anti-hypertensive medications were withheld.

CONCLUSION
Reninomas are mostly benign neoplasms that can lead to hypertension and severe end-organ damage. High clinical suspicion is required to diagnose this disease, and nephron-sparing surgery can render the patient normotensive.

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A BONY PREDICAMENT: CATCHING THE CULPRIT IN THE CHEST

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INTRODUCTION/BACKGROUND
We report a case of mediastinal parathyroid adenoma as a rare cause of severe hypercalcemia and bone deformities.

CASE
A 19-year-old male presented with progressively worsening scoliosis and restrictive chest wall deformity over 4 years. He underwent chest wall reconstruction surgery with insertion of a titanium plate. Hypercalcemia was incidentally