Spectrum of presentation and aetiology of adrenal haemorrhage: a case series

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Introduction:
• Adrenal haemorrhage is rare. There is a broad spectrum of clinical presentation and aetiology of the condition making it challenging to diagnose.1
• Endocrine dysfunction frequently complicates cases of adrenal haemorrhage.2
• Failure to recognise the condition or its complications can lead to devastating consequences for the patient.1

Methods:
All patients referred to our centre with adrenal haemorrhage between 2004-2014 were included in this retrospective study.
The clinical notes, laboratory & radiological investigations of each case were recorded.

Results
Presentation
• 10 patients with adrenal haemorrhage were identified.
• 7 patients presented with acute abdominal pain.
• Adrenal haemorrhage was an incidental histological finding in 2 patients and an incidental radiological finding in 1 patient.
• 3 patients were diagnosed with hypoadrenalism.
• 8 of the 10 patients were haemodynamically unstable at presentation, each of whom presented with acute abdominal pain.

Management & Outcomes
• 6 patients underwent elective adrenalectomy following haemodynamic stabilisation with no associated operative mortality.
• 2 patients had a diagnosis of vasculitis and were managed successfully with medical therapy.
• 1 patient died due to metastatic lung cancer

Table 1: summary of the presentation, radiological findings and clinical diagnoses of each case

Discussion & conclusion:
• The aetiology of adrenal haemorrhage is variable and identifying the underlying diagnosis can be challenging.1,2
• The appropriate management of the condition requires an awareness of the potential endocrinological consequences of adrenal dysfunction including glucocorticoid deficiency and catecholamine hypersecretion.
• In our centre elective adrenalectomy following endocrine investigations and haemodynamic stabilisation rather than emergency adrenalectomy is preferred.
• In this series there was no operative mortality associated with this approach, which is recognised as being elevated in patients operated on acutely for adrenal haemorrhage.

References: