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. 1,2
- Endocrine dysfunction frequently complicates cases of adrenal haemorrhage. 3
- 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.
  - 6 of the 10 patients were haemodynamically unstable at presentation, each of whom presented with acute abdominal pain.

Management & Outcomes
- 8 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

![Diagram showing adrenal haemorrhage categories]

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 (glucocorticoid deficiency and catecholamine hypersecretion).
- Elective adrenalectomy following endocrine investigations and haemodynamic stabilisation rather than emergency adrenalectomy is advised.
- There was no operative mortality associated with this approach, which is recognised as being elevated in patients operated for adrenal haemorrhage.

References: