

# ENDGAMES

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## STATISTICAL QUESTION

### Non-parametric tests

Which if any of the following statements are false?

- Non-parametric statistics may be used for normally distributed data
- Correlation coefficients are inappropriate for non-normally distributed data
- Medians are always a more valid way than means are to compare non-normally distributed data
- The significance level of a test should be increased when multiple tests are made in a study

Submitted by John Fletcher

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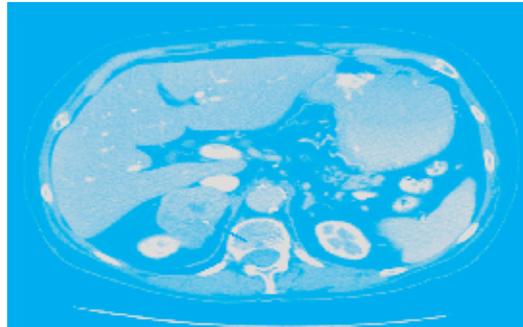


Fig 1 | Abdominal computed tomography scan showing a suprarenal mass (arrow)



Fig 2 | The patient's clinical features

## PICTURE QUIZ

### A woman with a suprarenal mass and hypertension

A woman presented to surgeons with abdominal discomfort in 1990. She underwent abdominal computed tomography, which showed a large incidental right suprarenal mass (fig 1). Follow-up scans suggested a benign stable adenoma, measuring 49×60 mm, and the decision was made not to operate. An endocrine opinion was not sought. Her medical history included hypertension.

In June 2006, at the age of 69, she re-presented with peritonitis, and a laparotomy showed a thickened wall cyst at the duodeno-jejunal junction. During elective excision of the cyst in April 2007, it was difficult to achieve haemodynamic stability. An unplanned resection of the suprarenal mass was performed concomitantly. The cyst stained strongly positive for CD117. Figure 2 shows the patient's clinical features.

- What is the patient's underlying condition?
- What is the cause of her hypertension?
- What is the incidental finding in this case, as suggested by the cyst's histology?

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## ON EXAMINATION QUIZ

### Stroke

The answer to this question, and more questions on this topic, are available from [www.onexamination.com/endgames](http://www.onexamination.com/endgames) until midnight on Wednesday.

This week's quiz is on stroke and is taken from the MRCP and MRCPI examinations.

A 35 year old woman was admitted to casualty after developing restlessness, hallucinations, and acute confusion. The symptoms came on within minutes of her having taken sumatriptan for migraine.

On admission she was vomiting and sweating profusely and seemed to be confused, with a Glasgow coma score of 14/15. Her blood pressure was 162/90 mm Hg, her pulse was 102 beats per minute and regular, and her temperature was 38.9°C. Heart sounds were normal, and her chest was clear on auscultation. A cranial nerve examination including fundoscopy was normal. Examination of the peripheral nervous system revealed normal tone, with four beats of ankle clonus bilaterally. Her reflexes were globally brisk, although power, sensation, and coordination were all normal.

The patient was taking fluoxetine for depression and sumatriptan for occasional migraines. She was a non-smoker and drank 10 units of alcohol a week.

Investigations showed: sodium 135 mmol/l (normal 137-144), potassium 3.9 mmol/l (3.5-4.9), urea 8.9 mmol/l (2.5-7.5), creatinine 130 mol/l (60-110), haemoglobin 10.2 g/dl (11.5-16.5), white cell count  $12 \times 10^9/l$  ( $4-11 \times 10^9$ ), platelets  $100 \times 10^9/l$  ( $150-400 \times 10^9$ ), prothrombin time 20.2 s (11.5-15.5), activated partial thromboplastin time 50 s (30-40), fibrinogen 7.8 g/l (1.8-5.4).

Which one of these potential therapeutic options should the patient not be given?

- Ciproheptadine
- Dantrolene
- Diazepam
- Intravenous fluids
- Withdrawal of causative medicines