Tied in a knot

Learning from our Incidents:

RED FLAGS in the Emergency Department

The case

A 78 year old man who had been visiting his wife in the hospital had just received "bad news" from his wife's treating doctor.

Thirty minutes after the upsetting conversation he began to vomit "bilious" material and was unable to tolerate oral intake. He was brought down to ED from the ward.

He was triaged as a category 5

The case

The gentleman gave a past medical history of AF / hypertension.

He was noted to have epigastric pain, but no history of fever or diarrhoea.

The case

On examination he was noted to have a soft non tender abdomen.

He was seen by a JMO who felt this was most likely stress induced vomiting, and he was discharged back to his wife's bedside

The case

2 ½ hours later the gentleman re-presented to ED with further vomiting after trying to eat something

He was again triaged as a category 5

Do you agree with the patient's triage allocation?

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The case

The previous presentation's diagnosis of "emotional related vomiting" was noted, and the impression was that this presentation was also attributable to stress.

The patient was commenced on iv fluids and admitted to the Emergency Short Stay unit with a plan to further assess him in the morning and likely discharge him home

The case

Overnight the patient required opiates for abdominal pain and iv antiemetics for nausea

Despite this he continued to have ongoing dry retching

In the morning he attempted to eat breakfast, but began to vomit shortly afterwards. He was therefore booked to have an abdominal ultrasound

The case

An abdominal ultrasound that morning showed simple gallstones

He continued to vomit during the afternoon, but in the early evening, after some buscopan, was noted to tolerate some juice.

At 5 pm he was discharged home with a diagnosis of vomiting secondary to a emotional response

Do you feel comfortable with the patient being discharged home?

The case

24 hours after being discharged home, the gentleman represents to ED with abdominal pain and reflux

The case

His observations were

HR 128

Sp02 92% RA

BP 192/102

RR 30

He was given a triage category 3

The observations are all in the red or yellow zones of the Between the Flags

The case

2 hours after presentation, the gentleman deteriorated with a decreased GCS and required assisted ventilation with a bag valve mask with Sp02 91%. His BP was 70/60

He was intubated and ventilated and on placement of an NG tube, 2 litre of brown vomitus was drained

His BP fell further to 56/40 and he was started on ionotropes

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The case

A CT abdomen revealed a femoral hernia causing a mid small bowel obstruction and ischaemia

The patient continued to deteriorate despite maximal medical therapy in ICU and was considered to be too unwell for surgical intervention. He subsequently died in ICU.

What are the lessons here?

"Anchoring" is a common cognitive bias. Decisions are based heavily on the first impression despite new information.

In health it can affect our clinical reasoning and can lead to diagnostic inaccuracies. To combat this always ask yourself "What else could it be?"

What are the lessons here?

Abdominal pain in the elderly is a very **common presentation** to ED

The **mortality** in this group is nearly 10%

It is diagnostically challenging and there are many pitfalls for the ED clinician

What are the lessons here?

Any patient who re-presents to the ED with the same complaint over a short period of time should be considered HIGH RISK

What is the evidence?

- Elderly patients (>65 yr.) account for 10-20% of all ED presentations . Abdominal pain is the presenting complaint in 2-3% of these patients. As the population continues to age we can expect to see more abdominal pain in the elderly

- Mortality in this group is high, and up to 9 times higher than abdominal pain in the younger patient

- Elderly patients may present very atypically. Vague, non specific histories and falsely reassuring observations and clinical examinations may lead even an experienced clinician to miss potentially life threatening conditions with catastrophic results.

Diagnostic challenges in abdominal pain in the elderly

- Histories may be hampered by hearing impairment, memory loss and stoicism
- BTF Observations may be falsely reassuring due to multifactorial reasons
  - The elderly may not have a fever as expected
  - A “normal” BP may be relatively hypotensive for the chronically hypertensive patient
  - Medications may blunt a tachycardia
- Classic signs of peritonism may be absent due to decreased muscle mass
  - Rigidity may be absent in 80% of viscus performation [1]

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Diagnostic imaging in this patient group

- The risk of ionised radiation in this elderly population is negligible
- A study [2] showed that CT abdomens in elderly patients presenting to ED has been shown to significantly alter;
  - The disposition of the patient in 25%
  - The suspected diagnosis in 45%
  - The need for surgical intervention
  - Diagnostic certainty
- This evidence, in conjunction with the diagnostic challenge in this group discussed previously, means that CT abdomens should be used liberally in this group of patients

References

1. McNamara RM. Acute abdominal pain *Emergency care of the elder person* 1996.; pp. 219–243

2. Esses D, Birnbaum A, Bijur P et al. Ability of CT to alter decision making in elderly patients with acute abdominal pain *Am J Emerg Med* 2004 22(4) 270-2

3. Lewis LM, Banet GA, Blanda M, Hustey FM, Meldon SW, Gerson LW Etiology and clinical course of abdominal pain in senior patients: a prospective, multicenter study *J Gerontol A Biol Sci Med Sci*. 2005;60(8):1071

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