



*Emergency  
Care Institute*  
NEW SOUTH WALES



**ACI** NSW Agency  
for Clinical  
Innovation

# 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?**

---

# 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

**SpO2** 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 SpO<sub>2</sub> 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 inotropes*

---

# 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 perforation [1]

---

# 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