Sara Bird
MBBS, MFM(clin), FRACGP, is Medicolegal Claims Manager, MDA National. sbird@mdanational.com.au

Failure to diagnose: bowel obstruction

Case histories are based on actual medical negligence claims or medicolegal referrals; however certain facts have been omitted or changed by the author to ensure the anonymity of the parties involved.

Missed or delayed diagnosis is an important patient safety problem. This article examines a claim involving an allegation of failure to diagnose a small bowel obstruction and highlights some of the underlying causes of diagnostic errors in general practice.

Case study

The patient, 36 years of age, attended the general practitioner, Dr Park, on 20 March 2005. The patient reported that she had been well until that morning when she experienced 'crampy' abdominal pain. There was no nausea, vomiting, diarrhoea, dysuria or fever. She was taking the oral contraceptive pill and no other medications. Abdominal examination revealed a soft, nontender abdomen with active bowel sounds. The patient indicated that the cramps were located in the epigastrium and left hypochondrium. The GP made a provisional diagnosis of gastrointestinal infection causing spasm and prescribed Panadeine Forte and asked the patient to return if the symptoms did not settle.

The patient returned 1 day later complaining of vomiting. Her abdominal pain was less but was now located in the lower abdomen. There was no diarrhoea. On examination, she was afebrile, pulse 90/min, BP 150/80. Abdominal examination revealed slight suprapubic tenderness only. Urinalysis showed ketones +++, protein + and a trace of blood. The GP requested: a full blood count, electrolytes and liver function tests, and a midstream urine test. An injection of Stemetil was given. The patient was asked to attend the following day for the results, or go to a hospital emergency department (ED) if her symptoms worsened.

On 22 March 2005, the patient phoned the GP to say she felt a bit better. Her vomiting had settled and the abdominal pain was easing. The GP told her that her test results were all normal, apart from a slightly elevated white cell count, which was consistent with an infection of the gut. He advised the patient to continue fluids.

Four days later, on 26 March 2005, the patient returned for review. She said her vomiting had settled but she had no appetite and had not opened her bowels properly for 6 days. On examination her abdomen was soft and mild tenderness was noted in the epigastrium. The GP diagnosed constipation, related to the codeine, and prescribed laxatives and a Microlax enema.

On 27 March 2005, the patient phoned the GP to say that she was vomiting again and had severe central abdominal pain. The GP told her to attend the ED. The ED admitting doctor noted a 7 day history of nausea, vomiting, constipation, and central and epigastric abdominal pain. A past history of a caesarean section in 2002 and a right ovarian cystectomy and division of pelvic adhesions in 2004 was obtained. Abdominal examination revealed a soft, tender abdomen, with maximum tenderness in the peri-umbilical area. There were no masses and high pitched abdominal sounds were noted. Per rectum examination revealed watery faeces. A provisional diagnosis of a small bowel obstruction was made. Abdominal X-ray showed multiple fluid levels and reduced gas in the large bowel, in keeping with a small bowel obstruction. The patient was commenced on intravenous fluids and kept nil by mouth. A small bowel series performed the following day was consistent with an abdominal stricture in the small bowel resulting in subacute/intermittent small bowel obstruction. The patient subsequently underwent a laparotomy and division of adhesions. She made good progress and was discharged home on the fourth postoperative day.

In 2008, Dr Park received a Statement of Claim alleging failure to diagnose small bowel obstruction.

The allegations against Dr Park (the defendant) in the Statement of Claim were as follows:

- **failure to apply a diligent and safe diagnostic strategy**
- **failure to take into account the patient's (plaintiff's) history of previous abdominal surgery**
- **failure to obtain a second opinion or refer the plaintiff to an ED**

- **failure to adequately consider the plaintiff's deteriorating condition and conduct further investigations, and**
- **failure to refer the patient for an abdominal X-ray.**

The plaintiff alleged that she would have responded to conservative treatment if she had been diagnosed earlier. She claimed damages for pain and suffering, and an unnecessary abdominal scar. The plaintiff alleged this episode had caused her to become depressed and this had contributed to the breakdown of her relationship with her partner.

General practitioner expert opinion served by the plaintiff concluded that Dr Park was correct in making a probable early diagnosis of a gastrointestinal infection or spasm. However, the expert was critical of his failure to take into account the patient's past history of abdominal surgery. The expert stated that the defendant should have asked if there were any 'serious disorders not to be missed' at the second consultation on 21 March 2005. The expert concluded that Dr Park's 'failure to carry out a plain X-ray of the abdomen constituted a breach of his duty of care to the patient and was below the standard of care expected of a reasonable GP'.

The plaintiff also served a report from her treating surgeon which concluded that if the 'bowel obstruction had been diagnosed from the start of the patient's symptoms, there was a high probability (about 90%) that the episode would have settled with conservative treatment, rather than requiring surgery'.

In response, Dr Park's solicitors obtained an expert GP opinion on his behalf. The defendant GP expert reported that the assessment on 20 March 2005 that the plaintiff's illness was caused by some form of gastrointestinal infection was entirely reasonable. At review on 21 March 2005, the GP expert opined that Dr Park would have been greatly reassured by the fact that the abdominal pain was settling. The development of nausea and vomiting was consistent with the working diagnosis of gastroenteritis. On 26 March 2005, the plaintiff's vomiting had settled but she was complaining that she had not opened her bowels properly for 6 days. The expert noted that it is common for patients with gastroenteritis and dehydration to 'move from a state of having bowels that are too active, to one of the reverse and constipation'. The expert also noted that Panadeine Forte can cause constipation. The expert concluded 'on the basis of these symptoms and clinical findings, I do not believe that Dr Park can be criticised for failing to recognise what we now know to be the underlying pathology'.

In this case, there was a sharp divergence in the views of the two GP experts about the standard of care exercised by Dr Park. The claim for compensation was mainly for general damages (pain and suffering). In light of the relatively low quantum, a decision was made by the defendant's solicitors to resolve the claim on a commercial basis. Seven months after the commencement of the legal proceedings, the matter was settled for less than $40 000.

Discussion and risk management strategies

In this case, it was alleged that the GP had failed to order an abdominal X-ray resulting in a failure to diagnose small bowel obstruction. The Threats to Australian Patient Safety (TAPS) study found that around one error was reported per 1000 patient consultations per year. Approximately 30% of the reported errors in TAPS related to deficiencies in the knowledge and skills of health professionals, such as mistakes in diagnosis or managing patient care. Of these, about one-third were diagnostic errors.[1] Knowledge and skills errors reported in the TAPS study included:

- failing to take an adequate patient history during a consultation
- failing to adequately perform a physical examination
- errors in requesting investigations (eg. asking for the wrong test or omitting to ask for an appropriate test)
- errors in interpreting investigations that had been requested
- errors in knowledge required to effectively manage medications (eg. not being aware of current best practice guidelines, drug interactions or dosage schedules)
- errors in knowledge or skills required to undertake a specific procedure.[2]

A study of medical negligence claims in which patients alleged a missed or delayed diagnosis in the ambulatory setting found that the most common breakdowns in the diagnostic process were:

- failure to order an appropriate diagnostic test (55%)
- failure to create a proper follow up plan (45%)
- failure to obtain an adequate history or perform an adequate physical examination (42%), and
- incorrect interpretation of diagnostic tests (37%).

The leading factors that contributed to the errors were failures in judgment (79%), vigilance or memory (59%), knowledge (48%), patient related factors (46%) and handover of patient care (20%). The median number of process breakdowns and contributing factors per error was three.[3]

Diagnostic errors in general practice that result in harm to patients are typically the result of multiple breakdowns, and involve both individual and system factors. An awareness of the most common types of breakdowns and contributing factors may minimise the occurrence of these errors.

Conflict of interest: none declared.

References

1. Makeham MA, Stromer S, Bridges-Webb C, et al. Patient safety events reported in general practice: a taxonomy. Qual Saf Health Care 2008;17:53–7.
2. Makeham MA, Mira M, Kidd MR. Lessons from the TAPS study: Knowledge and skills errors. Aust Fam Physician 2008;37:145–6.
3. Gandhi TK, Kachalia A, Thomas EJ, et al. Missed and delayed diagnoses in the ambulatory setting: a study of closed malpractice claims. Ann Intern Med 2006;145:488–96.

AFP CORRESPONDENCE afp@racgp.org.au