# Failure to diagnose – fractures

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'Failure to diagnose' claims are the most common cause of medical negligence claims in general practice. This article examines a claim involving a failure to diagnose a fracture and outlines some risk management strategies for general practitioners to minimise the possibility of a claim arising from a failure to diagnose orthopaedic problems.

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

**Case history**

The 28 year old electrician was involved in a riding accident on 12 July 2001. He was taken to the local hospital complaining of pain and swelling in his right forearm and wrist. The intern in the emergency department (ED) suspected a wrist or scaphoid fracture. X-rays of the hand and arm were reported as normal and the intern discharged the patient for follow up by his local general practitioner.

On 18 July 2001, the patient saw his GP. He complained of ongoing pain and swelling in his right hand and wrist. The patient told the GP that the X-rays performed in the ED after the accident had been normal. Clinical examination suggested the possibility of a scaphoid fracture and the GP ordered further wrist X-rays with scaphoid views. These were reported as normal. The GP made a provisional diagnosis of a severe sprain and gave the patient a medical certificate for a further 2 weeks off work.

Ten days later, the patient was seen by the GP for review of his work certificate. At this consultation, the patient complained of ongoing pain in his wrist and was referred for further X-rays. The report concluded: 'right wrist – no fracture detected. No evidence of scaphoid fracture'. The GP reviewed the X-rays and advised the patient there was no fracture evident.

The patient saw the GP again on 10 September 2001. At this time, the patient had returned to work but he complained of numbness and tingling in the fingers of his right hand. The wrist swelling had resolved and the GP administered a cortisone injection for presumed carpal tunnel symptoms. The patient's numbness and tingling in his fingers did not settle and, on 16 December 2001, the GP referred the patient to an orthopaedic surgeon for review. The orthopaedic surgeon diagnosed carpal tunnel syndrome and the patient underwent a right carpal tunnel release on 5 January 2002.

A few months later, the patient returned to his GP complaining of a recurrence of his right wrist and hand pain. He was having difficulties performing his duties at work. The GP ordered further X-rays that revealed a dislocation of the lunate. Review of the X-rays taken previously indicated that this injury was actually apparent on the X-rays performed in mid 2001. The GP referred the patient for immediate orthopaedic review. The surgeon advised the patient that surgical reduction of the lunate was not appropriate as it was now 10 months postinjury and it was too late to perform any remedial surgery.

In November 2002, the patient commenced legal proceedings. The local hospital, the GP and the radiologist were all named as defendants in the claim.

## Medicolegal issues

The Statement of Claim alleged that the three defendants had failed to diagnose the palmar dislocation of the lunate in a timely fashion. As a result of the 'failure to diagnose', the patient alleged that he:

- had to undergo a carpal tunnel release
- will suffer progressive osteoarthritis in the joints of his right wrist
- has suffered pain and restriction in the movement of his right wrist
- will have to undergo a wrist fusion in the future, and
- will suffer a permanent 30% disability of his upper limb. The patient alleged that he would have only suffered a 10% disability of the upper limb had the correct diagnosis been made and the surgery performed within 3 months of the date of injury, ie. by 12 October 2001.

An expert opinion from a radiologist confirmed that the lunate dislocation was visible on the X-rays performed at the local hospital and also on the two X-rays ordered by the general practitioner in July 2001. The patient claimed a total of $300 000 in compensation, comprising a claim for general damages, economic loss, out-of-pocket medical expenses and care costs. Expert opinion was sought from another GP on behalf of the defendant GP. This report stated:

'I think the GP would have been entitled to rely on the report of the specialist radiologist and could not necessarily have been expected to detect the appearance of a lunate dislocation on his review of the X-rays. I believe it would be reasonable for the GP to review the X-rays having ordered them but, as I said, this is a very unusual injury and I think would be outside the expected expertise of a GP to detect'.

The expert report concluded that the GP's management met the standard expected of a reasonable GP.

## Discussion

For a patient to be successful in a claim of medical negligence, he or she must prove:

- that the medical practitioner owed a duty of care to the patient
- that the duty of care was breached, and
- the breach caused damage to the patient (causation).

Should the patient fail to establish any of the above, their claim will be unsuccessful.

In this case, it was evident that the GP had acted entirely appropriately and in accordance with the standard of a competent GP. The GP had maintained a high index of suspicion of a fracture and organised further X-rays when the patient's symptoms did not settle. When the patient developed further symptoms, the GP organised referral to an orthopaedic surgeon for review.

Based on the expert GP report, the patient and the other defendants agreed to discontinue the claim against the GP. Interestingly in this case, the fracture was missed on X-ray by more than one radiologist. Indeed, the orthopaedic surgeon who performed the carpal tunnel release in early 2002 had also missed the underlying cause of the carpal tunnel syndrome. Ultimately, the claim was settled on behalf of the hospital and the radiologist.

## Risk management strategies

It has been estimated that up to 50% of all medical negligence claims against GPs involve a 'failure to diagnose'.[1] The three most common clinical presentations leading to an allegation of a failure/delay in diagnosis are:

- trauma and orthopaedic conditions, eg. scaphoid and other hand fractures, tendon and/or nerve injuries in hand lacerations, slipped upper femoral epiphysis
- infection, eg. osteomyelitis, postoperative sepsis, and
- malignancy, eg. breast cancer.[1]

Similarly, studies of errors in general practice reveal that those related to diagnosis are the most common type of error reported in general practice, varying from 26 to 78% of identified errors.[2] Common themes in the failure to diagnose orthopaedic claims include:

- failure to order an X-ray when indicated
- failure to order an X-ray of the appropriate area, eg. performing an X-ray of the knee in a young child who is subsequently diagnosed with a slipped upper femoral epiphysis
- failure to follow up X-ray results, eg. results filed before review by the ordering practitioner.

A review of claims involving a 'failure to diagnose' identified the following themes:

- failure to perform an appropriate physical examination
- inadequate follow up arrangements
- lack of appropriate investigation
- test results not followed up
- poor communication with patients and/or colleagues, and
- poor medical record keeping, including a failure to document a management plan.[1]

An understanding of the nature and underlying causes of claims and errors involving a 'failure to diagnose' may assist GPs in minimising these incidents in general practice.

Conflict of interest: none declared.

### References

1. Problems in general practice: delay in diagnosis. The MDU, 1998.
2. Sandars J, Esmail A. The frequency and nature of medical error in primary care: understanding the diversity across studies. Fam Pract 2003;20:231–236.

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