A puzzling and persistent patient

Timely and accurate diagnosis is the goal of every health practitioner when assessing a patient. Delays can lead to a worsening of the condition and complications in its treatment. Recently, I concluded an investigation into the actions of two general practitioners who missed a diagnosis of subacute bacterial endocarditis. This case highlights the importance of communication among providers, and the need to reassess a diagnosis when a condition does not respond to treatment.

Subacute bacterial endocarditis is a very uncommon condition. The number of new cases of endocarditis diagnosed each year has been estimated at two to six per 100,000 patients assessed. In a lifetime of practice, a general practitioner may never encounter this condition, or encounter it only once or twice. The symptoms are nonspecific and similar to many common disorders. A GP would need to have a high degree of suspicion to consider endocarditis as a possible explanation for a patient's fever, chills or weight loss. Some delay in diagnosis of endocarditis is typical. If detected early enough, antibiotic therapy may be effective; if left untreated or if antibiotic therapy fails, surgery to replace the affected heart valve may become necessary.

Is delayed diagnosis of this rare condition a breach of the Code of Consumers' Rights? This question was posed by a recent case.

Recent case

The case involved a small-town medical clinic staffed by several GPs. Over 30% of the practice population fell within the lowest socio-economic decile. Ordering X-rays and laboratory tests required referral to the nearby hospital. My investigation considered the actions of two GPs, Dr A and Dr B, and a 40-year-old patient, Ms Z.

Since enrolling as a patient one year before the relevant events, Ms Z presented frequently at the clinic — at least once and sometimes several times every month. She complained of headaches and anxiety. She sought repeat prescriptions of pain and sedative medications. Both she and her partner had been identified as possible drug seekers. Her computerised medical notes recorded poor compliance, a history of dependence on alcohol, abuse of marijuana, and (in capital letters) "abusing physicians". A single notation of "congenital hole in heart" appears early in her notes.

It is difficult to identify when Ms Z began to develop endocarditis. On 6 December, Ms Z presented at the clinic, complaining of pain. She had been at a party the night before and had fallen against a wall, but was vague about the details. Dr A assessed her and noted tenderness in her right upper rib cage and a reduced range of right shoulder movement, although no bruising was visible. It appeared to be a musculoskeletal problem. Elevating her arm in a sling appeared to provide relief. Dr A also prescribed pain medication.

Dr B attended Ms Z at her next two presentations, on 17 and 19 December. Ms Z complained of pain and nausea. Dr B completed a certificate excusing her from work for four days and prescribed pain medication. At Ms Z's next presentations, on 21 and 26 December, she was seen by Dr A, who prescribed further pain medication and

referred her to the nearest hospital for X-rays. X-rays taken the next day revealed cervical spine degenerative change, but a normal shoulder.

Ms Z presented 11 more times over the subsequent four weeks, complaining of pain that had migrated to her left shoulder, nausea, shivering and weakness. Dr A performed six of these assessments; on the other occasions, she was seen by Dr B. Her medical notes over this time include three references to the smell of alcohol on her breath and at several points concern is expressed regarding her continued requests for pain medications, including morphine.

At her 11th presentation, on 24 January, Dr A referred Ms Z to hospital for further diagnostic investigation. His referral letter was very brief: it did not mention the original complaint of reported physical injury or the numerous unsuccessful attempts to treat that injury. Dr A referred only to Ms Z's chest pain and to his suspicion of "a coronary event". Chest X-rays, electrocardiogram, and a full blood count completed that day were reported as normal. Ms Z was discharged back to the care of her GP for follow-up.

At her next visit to the clinic a week later, Dr A referred Ms Z to an orthopaedic outpatient service. In this referral letter, Dr A describes Ms Z's "immense intake of medications such as zoplicone, tramadol, diazepam, dhc continuus, imipramine, lorazepam, paradex, brufen, clonazepam, diclofenac, fluoxetine, cipramil, and rivotril, provided by a variety of 'GPs'."

Ms Z returned one further time to the clinic before presenting to the emergency department on 20 February with a fever and severe back pain. At that point, nearly 11 weeks had elapsed since the 6 December presentation. Further blood tests were done. The hospital recommended admission, but Ms Z refused. Two days later, when her blood cultures were reported positive for enterococcus, Ms Z was diagnosed with subacute bacterial endocarditis. Although the hospital contacted Ms Z and advised her to return urgently for admission, Ms Z did not present for another two days. Long-term antibiotic treatment was administered; however, surgery was necessary to replace the affected aortic valve.

ACC concluded that the delay in diagnosis amounted to "medical error" on the part of Dr A, who saw Ms Z most frequently and at pivotal points.

HDC decision

As Health and Disability Commissioner, I have broad discretion to decide what action to take on complaints. A "medical error" finding by ACC does not necessarily indicate a breach of the Code.

I obtained independent expert advice from Dr Keith Carey-Smith, a GP. He noted that endocarditis presents a diagnostic challenge. It is a condition most often identified through blood culture, which is not a test usually ordered by a GP. Although Dr Carey-Smith expressed "moderate" disapproval of Dr A's brief referral letter of 24 January and failure to record Ms Z's temperature after her report of shivering, he observed that both Dr A and Dr B appeared caring and attentive in their assessments of Ms Z. Concern was noted at the large quantities of analgesic and psychoactive medications prescribed to Ms Z by both doctors. Although always prescribed in small

quantities, the total amount of two drugs in particular exceeded the recommended dosage for the time period. Benzodiazepines and opiates should be prescribed cautiously to patients with suspected drug misuse.

While her medical notes indicate that Ms Z was difficult to treat, the providers' own diagnostic uncertainties were not evident. Dr A and Dr B did not consult with each other about Ms Z's presentations; had they done so, it is possible that she may have been referred earlier.

Upon review of all relevant information, I decided to discontinue my investigation. Given her account of physical injury, it was reasonable that Dr A initially attributed Ms Z's symptoms to a musculoskeletal problem. The results of the specialist referrals appeared to confirm this belief. Unfortunately, this set into motion a series of clinical encounters in which an alternative explanation for the ongoing symptoms was not considered.

Further complicating the situation was Ms Z's history of presentations at the clinic. These facts did not lessen Dr A's or Dr B's duty to provide appropriate services, but they contributed to the overall picture. A missed diagnosis of a rare condition with insidious symptoms is not necessarily indicative of negligent care. In my view, while the care Ms Z received was not optimal, it was adequate in the circumstances.

I also took into account the significant steps taken since these events by Dr A, Dr B, and the clinic where they practised. Both doctors reflected on the importance of carefully reviewing patients with presumed injury who do not respond to treatment. Perhaps most importantly, the clinic instituted systems to make it easier for staff to discuss puzzling cases and difficult patients. The clinic appointed a full-time staff social worker and arranged staff training by a local drug and alcohol service.

Lessons to be learned

This case highlights several features of good medical practice. When multiple providers attend a patient who presents frequently, communication between the treating doctors is very important. When treatment proves unsuccessful, a review of the original diagnosis is in order. Keeping comprehensive and detailed medical records assists in any review. Presumed injury may mask other pathology. Small quantities of medication prescribed frequently may add up to prescriptions in excess of recommended dosage.

It is also important that doctors put aside any prejudices. For Dr A and Dr B, providing good care to Ms Z required setting aside any scepticism derived from her history of drug and alcohol abuse with multiple presentations, and seeing her as a patient in pain, not responding to treatment, with ongoing symptoms that were not responding to treatment in the expected time frame. Acknowledging the mystery might have helped to solve it earlier.

Ron Paterson **Health and Disability Commissioner**

New Zealand Doctor, 14 June 2006