This issue of the Future Leaders Communiqué considers the case of Ms M, a patient whose care was managed by a team of experienced medical practitioners from various specialties. Despite this, her symptoms were not reconciled, resulting in a missed diagnosis.

Although in this case a series of oversights resulted in a catastrophic outcome, many doctors can relate to the seemingly innocuous events preceding Ms M’s death – rushing a discharge summary, accepting a diagnosis prima facie, or diminishing the concerns of a family member.

When I first read the coroner’s report on Ms M, I felt relief that I was not one of the doctors held up to scrutiny. As a junior doctor, the fear of making a cataclysmic mistake stalks you. This fear follows you through the wards. Even so, I couldn’t help also feeling concern about the oversights and many loose ends in clinical care that conspired against Ms M, culminating in her death. But then I remembered my patient, Mr S.

Mr S was admitted to hospital during my rotation in psychiatry, in my intern year. As the psychiatry intern, I oversaw sixteen patients aged (for the most part) over sixty years old. With his flat expression, shuffling gait and monosyllabic speech, Mr S was the kind of patient I had become familiar with during my stint on the ward. He was shepherded, resistive but acquiescent, onto the ward by his wife and son, who deposited on my desk a tome of specialists’ letters, pamphlets and notes they had taken themselves.

The contents were pretty grim. A general practitioner (GP) had diagnosed Mr S with Parkinson’s disease six months earlier, which was confirmed by both a geriatrician and a neurologist (who commenced treatment with L-dopa, but commented in a later letter that Mr S had grown paradoxically stiffer since taking the drug). The dose was increased as Mr S became more agitated and less communicative. This had led his doctors to ponder alternative diagnoses.

Eventually, “?LBD” appeared in a letter from the GP, which morphed into “Lewy body dementia” in the geriatrician’s response. Mr S’s family were unable to offer any further details to bolster the contents of these letters. He had received so many different diagnoses they had lost track. They had only brought him in to hospital after he started losing enormous amounts of weight, due to not eating or drinking, and spending most nights pacing the hallways.

The history, when I presented it to my consultant, was a mess. These documents painted an unsubstantiated, fluctuating chronology, however, Mr S’s GP, geriatrician and neurologist all seemed to agree on one thing. All had dropped the “?” from “Lewy body dementia”. In hindsight (especially after reading the case of Ms M), I feel embarrassed about my readiness to accept the diagnosis given to Mr S. But as a fledgling doctor, I didn’t feel it was my place to question the expertise of three consultants.

If it were not for my supervising consultant psychiatrist pushing me to chase up each specialist and clarify the contents of each letter, I would never have discovered that not one of Mr S’ specialists considered themselves to be the diagnostic ground zero. His diagnosis simply stemmed from the sudden promotion of a differential — the amputation of a question mark.
This information meant that rather than being faced with the options of percutaneous endoscopic gastrostomy (PEG) feeds versus palliation, we could consider psychotropic medications and electroconvulsive therapy (ECT).

Ultimately, Mr S received a course of ECT for psychotic depression. His delusions began to fall away. He gave his 4-wheel frame to another patient. One day he cracked a joke during rounds, on another I came back from lunch to find him watching the footy. I finished my rotation when Mr S was half way through his treatment, but several months later I saw him as I drove home from the hospital, walking with his wife and smiling. Reading the story of Ms M reminds me how easily we could have led Mr S down a very different path.
Ms M was a 69 year old woman with a mild intellectual disability, who had moved from her family’s farm to a supported accommodation unit in 1996. In 2004-2005 Ms M's sister noticed her unit becoming increasingly messy and Ms M had become uncharacteristically aggressive and argumentative. Ms M also complained of deteriorating eyesight around that time.

In November 2006 Ms M was hospitalised after a fall, which was attributed to a urinary tract infection (UTI). In December 2006 Ms M was discharged from hospital directly to an aged care facility. The discharge summary from the hospital recorded ‘dementia’ as a primary diagnosis, which was justified by apparent short-term memory deficits (although this was never formally tested). After discharge, Ms M's behaviour deteriorated and she became more intrusive, disinhibited and aggressive. Her eyesight continued to deteriorate and she also developed a progressive tremor in both hands. Due to reduced mobility, Ms M was eventually confined to a wheelchair.

The discharge to the nursing home also led to a new team of specialists assuming responsibility for Ms M's care. The team included a GP and a physician (who eventually diagnosed her with Parkinson's disease and considered Lewy Body disease in the setting of her dementia), and two ophthalmologists (who investigated her deteriorating vision). Over the next 18 months, Ms M was reviewed on multiple occasions by her medical specialists, however, there was no correspondence provided to the facility or between the treating doctors about those consultations.

One morning in March 2008, staff found they were unable to rouse Ms M and so a transfer by ambulance to an acute care hospital was organised. Upon arrival to hospital, a computed tomography (CT) scan of her brain revealed that Ms M had a large meningioma, causing hydrocephalus and significant mass effect on the frontal lobes bilaterally.

Behavioural changes

Information obtained from the coroner's investigation revealed Ms M was involved in a farming accident as a child and may have acquired a mild traumatic brain injury, however, this did not prevent her from remaining on the farm with her parents, then moving to a supported accommodation unit in 1996.

Ms M had an established relationship with her regular GP, who was away when she was hospitalised in November 2006. Her regular GP had verbally handed over details about Ms M to another member of their practice. The GP mentioned that Ms M's family were considering a change in accommodation to placement in an aged care facility but that they did not believe this step was required at that point in time. Placement was, however, arranged during Ms M's hospital admission and a discharge summary requested of the second GP who listed Ms M's primary diagnosis as “dementia”. This covering GP claimed that the basis for their documentation stemmed from the verbal handover.

The third GP who assumed Ms M's care at the facility, managed her on the basis that she had a confirmed diagnosis of moderate to severe dementia. He assumed that a CT scan had been done at some stage for that diagnosis to have been made. The diagnoses of Parkinson's disease and Lewy Body dementia were later applied when Ms M developed involuntary movements, mobility issues, and a bilateral tremor in her upper limbs.
Deteriorating vision

The second clinical issue to come under scrutiny during the inquest was Ms M's deteriorating vision. Ms M's regular ophthalmologist had noted a history of macular degeneration and cataracts, with a surprising degree of unilateral vision loss (her left eye could only see hand movements in front of it) but normal optic discs, prior to her admission to hospital.

Ms M was followed-up by a different ophthalmologist who consulted from the same clinic. The second ophthalmologist noted a slight pallor of the left optic disc, but considered this to be within the scope of a normal physiological variance. Four months after admission to the aged care facility, Ms M was reviewed by a third ophthalmologist who found she had complete left-sided unilateral vision loss and generalised pallor of the left optic disc, indicating optic nerve atrophy. This third ophthalmologist stated that such a case of unilateral vision loss necessitated further investigation and that he would normally seek further details of the patient's history from their general practitioner. At the time, the ophthalmologist was seeing up to 40 patients per day. It was his practice to take notes during a consultation, which were sent on to file or, for dictation. As no letter to Ms M's general practitioner was received or uncovered, the ophthalmologist could only speculate that the consultation notes had been mistakenly filed as a record, as opposed to being flagged for dictation. He was unaware of any effort made by Ms M's general practitioner to contact his clinic to chase the outcome of the consultation.

CORONER’S FINDINGS

The coroner focused on the quality of communication between Ms M's numerous specialists and found the following:

- The covering GP should not have listed Ms M's primary diagnosis as "dementia" on the discharge summary to the aged care facility, given the lack of investigations and absence of a documented past history of dementia;
- The third ophthalmologist should have communicated the finding of Ms M's unilateral vision loss to her treating GP, as this would have revealed a rapid deterioration in her vision (i.e. normal optic discs to left-sided unilateral pallor) over the course of 12 months, which would have prompted further investigation;
- Although the third ophthalmologist maintained it was his standard practice to dictate a letter to a patient's GP seeking a thorough history in light of abnormal findings, no such letter was ever produced (possibly due to the dictation being misfiled);
- The treating GP from the aged care facility should have followed up the outcome of Ms M's ophthalmology appointment, as this too would have revealed the extent of her deteriorating vision.

As meningiomas are benign, slow growing tumors, they are often treatable (either in whole or in part) if detected promptly. The delays and misdirected treatments attributable to the poor communication between Ms M's specialists led the coroner to find that Ms M's death was preventable, and to recommend that residents admitted to aged care facilities undergo compulsory imaging of the brain if they had not done so previously.

AUTHOR’S COMMENTS

Doctors will always grapple with the issue of missed and misinterpreted diagnoses. Likewise, information will sometimes fall between the pages as patients are handed from one practitioner to another.

As a junior medical officer you encounter supervisors who are painfully thorough, who push you to chase down the genesis of every diagnosis and prescription, while others trust the trail laid out in the documented history. In Ms M’s case, the coroner pointed to the importance of striking a balance between these approaches, finding that there had been an absence of appropriate investigations, correspondence and follow-up documentation (whether in the form of a letter, progress notes or investigations) remains the main form of communication in medicine. However, its contents should not be held above question. Most senior doctors are (or should be) extremely open to discussing their justifications for applying a diagnosis or adopting a treatment.

The coroner recommended that all new aged care facility residents should undergo a CT brain scan, if they had escaped previous imaging. This recommendation reflects the difficulties surrounding the ability to accurately diagnose cognitive decline in patients with low cognitive reserve such as Ms M who had a pre-existing acquired brain injury (ABI). Patients with chronic cognitive impairment may display subtle signs of decline secondary to neurodegeneration that are overlooked, due to the assumption that the signs are related to the pre-existing condition.

Dementia encapsulates impairment affecting cognition, function and behaviour. While there are clinical tools to assist in assessing the former (i.e. Mini Mental State Examination, ‘MMSE’), doctors rely primarily on anecdotal evidence when appraising the latter (i.e. assessing for the presence of Behavioural and Psychological Symptoms in Dementia, ‘BPSD”).

While junior doctors can easily assess cognition at the bedside, patients’ functional and behavioural status are often more elusive. An extremely thorough knowledge of a patient’s baseline is needed to flesh out whether they are displaying new or worsening symptoms. Sheehan (2012) outlines the sensitivity and specificity of several widely used clinical tests used to screen for dementia that is worth a read, as the article considers the tools used to assess cognition, function and behaviour separately.

In the case of Ms M, her initial GP recorded an MMSE score of 24/30. Her new GP at the aged care facility chose not to perform another MMSE as they felt asking her to spell and perform calculations would be offensive given her pre-existing mild cognitive impairment. Ms M’s sister reported the functional decline (i.e. decreased capacity for self-care and hygiene) and notable personality changes in 2004-2005, progressing to significant disinhibition and behavioural issues in 2006. Perhaps the most important factor in Ms M’s tragic decline was the lack of clear, written communication between her clinicians, which forms an essential part of patient handover. Because of this, the timelines regarding her deteriorating vision, behavioural changes and functional decline were muddled and failed to prompt further investigation that may have revealed her actual diagnosis. Important red flags were dismissed, seemingly because Ms M had an ABI that either confounded clinical tests or made her doctors too uncomfortable to perform them in the first place. If nothing else, this case should remind us that we should not short-change patients with an intellectual disability (or any pre-existing impairment) by failing to perform clinical tests that either establish a baseline or can be compared against a prior result. In Ms M’s case, this may have made all the difference.

KEYWORDS

Death, Aged Care Facility, Communication, Missed diagnosis, Documentation, Handover
THOUGHTFUL HISTORY TAKING

Professor Daniel O’Connor
Deputy Chief Psychiatrist,
Aged Persons Mental Health
Department of Health and Human Services, Victoria

Are medical practitioners more dismissive of elderly patients of cognitive impairment? Do you think this impacts their health in other ways?

Doctors, like all human beings, make sense of their complex worlds by constructing likely explanations of problems based on some mixture of received wisdom and lived experience. This typically works well. Patients provide an accurate enough history, cooperate with investigations, take their treatment and report back if symptoms worsen. Doctors sense correctly if patients’ progress doesn’t match expectations and escalate matters by checking the history, ordering further tests or trying another treatment. There’s a risk of failure in any complex enterprise, however, and this risk increases dramatically if patients can’t provide an accurate history, comply with treatment demands or report on progress because of intellectual disability, mental illness or dementia. People with these conditions have greatly reduced access to tests, treatments and specialists – which helps to explain the 20-year reduction in life expectancy for people with serious, persistent mental illness.

It couldn’t possibly have been due to Parkinson's disease, the putative but incorrect diagnosis, but no further action was taken to check why a mildly intellectually disabled person who coped adequately in supported accommodation deteriorated so dramatically in terms of her personality, behaviour, mobility and vision.

A proper history would have prevented this tragic misdiagnosis but doubtless the frontal meningioma would have made it impossible for the patient herself to articulate the correct sequence of events. Her sister, who was better placed than paid carers to report accurately on changes over time, might not have been present when doctors visited or was not invited to consultations, or accepted the explanations offered by "experts". As it happens, she was the expert when it came to tracking the patient's decline but her expertise was discounted. The coroner's report is silent on the sequence of events here. How can the junior medical officer (JMO) advocate for patients who lack advocates?

JMOs play a vital role in collecting and organising the information about patients' histories and investigations that make it possible for senior staff to arrive at an accurate diagnosis and well-targeted treatment plan. But, if the history is incorrect, everything that follows is at risk.

JMOs are required to take accurate histories and, furthermore, to note instances in which the histories first offered by patients might be misleading because of delirium, mental incapacity, sensory impairment or lack of fluency in English. A good doctor takes good histories – and senses when a history, even when taken diligently, doesn’t "add up". This isn’t a simple task. In hospitals, histories are taken on multiple occasions by multiple junior and senior staff members.

But, oddly enough, lack of access to specialists didn’t apply here. The woman concerned had been seen by three ophthalmologists – a rarity surely – who noted her visual deficits but failed to make sense of what was happening. Even a complete unilateral vision loss was discounted.

It’s possible, though, that the JMO who clerked the patient on her admission to hospital after falling might have alerted the consultant to the possibility of a missed diagnosis by questioning the patient’s sister. JMOs meet family members more often than seniors and can exploit this opportunity to re-visit the histories of patients who can’t speak for themselves. The patient was clearly vulnerable. She lived in supported accommodation and the notes most probably made mention of intellectual disability.

But, oddly enough, lack of access to specialists didn’t apply here. The woman concerned had been seen by three ophthalmologists – a rarity surely – who noted her visual deficits but failed to make sense of what was happening. Even a complete unilateral vision loss was discounted.

THOUGHTFUL HISTORY TAKING

Professor Daniel O’Connor
Deputy Chief Psychiatrist,
Aged Persons Mental Health
Department of Health and Human Services, Victoria

Are medical practitioners more dismissive of elderly patients of cognitive impairment? Do you think this impacts their health in other ways?

Doctors, like all human beings, make sense of their complex worlds by constructing likely explanations of problems based on some mixture of received wisdom and lived experience. This typically works well. Patients provide an accurate enough history, cooperate with investigations, take their treatment and report back if symptoms worsen. Doctors sense correctly if patients’ progress doesn’t match expectations and escalate matters by checking the history, ordering further tests or trying another treatment. There’s a risk of failure in any complex enterprise, however, and this risk increases dramatically if patients can’t provide an accurate history, comply with treatment demands or report on progress because of intellectual disability, mental illness or dementia. People with these conditions have greatly reduced access to tests, treatments and specialists – which helps to explain the 20-year reduction in life expectancy for people with serious, persistent mental illness.

It couldn’t possibly have been due to Parkinson’s disease, the putative but incorrect diagnosis, but no further action was taken to check why a mildly intellectually disabled person who coped adequately in supported accommodation deteriorated so dramatically in terms of her personality, behaviour, mobility and vision.

A proper history would have prevented this tragic misdiagnosis but doubtless the frontal meningioma would have made it impossible for the patient herself to articulate the correct sequence of events. Her sister, who was better placed than paid carers to report accurately on changes over time, might not have been present when doctors visited or was not invited to consultations, or accepted the explanations offered by “experts”. As it happens, she was the expert when it came to tracking the patient’s decline but her expertise was discounted. The coroner’s report is silent on the sequence of events here. How can the junior medical officer (JMO) advocate for patients who lack advocates?

JMOs play a vital role in collecting and organising the information about patients’ histories and investigations that make it possible for senior staff to arrive at an accurate diagnosis and well-targeted treatment plan. But, if the history is incorrect, everything that follows is at risk.

JMOs are required to take accurate histories and, furthermore, to note instances in which the histories first offered by patients might be misleading because of delirium, mental incapacity, sensory impairment or lack of fluency in English. A good doctor takes good histories – and senses when a history, even when taken diligently, doesn’t “add up”. This isn’t a simple task. In hospitals, histories are taken on multiple occasions by multiple junior and senior staff members.

But, oddly enough, lack of access to specialists didn’t apply here. The woman concerned had been seen by three ophthalmologists – a rarity surely – who noted her visual deficits but failed to make sense of what was happening. Even a complete unilateral vision loss was discounted.

THOUGHTFUL HISTORY TAKING

Professor Daniel O’Connor
Deputy Chief Psychiatrist,
Aged Persons Mental Health
Department of Health and Human Services, Victoria

Are medical practitioners more dismissive of elderly patients of cognitive impairment? Do you think this impacts their health in other ways?

Doctors, like all human beings, make sense of their complex worlds by constructing likely explanations of problems based on some mixture of received wisdom and lived experience. This typically works well. Patients provide an accurate enough history, cooperate with investigations, take their treatment and report back if symptoms worsen. Doctors sense correctly if patients’ progress doesn’t match expectations and escalate matters by checking the history, ordering further tests or trying another treatment. There’s a risk of failure in any complex enterprise, however, and this risk increases dramatically if patients can’t provide an accurate history, comply with treatment demands or report on progress because of intellectual disability, mental illness or dementia. People with these conditions have greatly reduced access to tests, treatments and specialists – which helps to explain the 20-year reduction in life expectancy for people with serious, persistent mental illness.

It couldn’t possibly have been due to Parkinson’s disease, the putative but incorrect diagnosis, but no further action was taken to check why a mildly intellectually disabled person who coped adequately in supported accommodation deteriorated so dramatically in terms of her personality, behaviour, mobility and vision.

A proper history would have prevented this tragic misdiagnosis but doubtless the frontal meningioma would have made it impossible for the patient herself to articulate the correct sequence of events. Her sister, who was better placed than paid carers to report accurately on changes over time, might not have been present when doctors visited or was not invited to consultations, or accepted the explanations offered by “experts”. As it happens, she was the expert when it came to tracking the patient’s decline but her expertise was discounted. The coroner’s report is silent on the sequence of events here. How can the junior medical officer (JMO) advocate for patients who lack advocates?

JMOs play a vital role in collecting and organising the information about patients’ histories and investigations that make it possible for senior staff to arrive at an accurate diagnosis and well-targeted treatment plan. But, if the history is incorrect, everything that follows is at risk.

JMOs are required to take accurate histories and, furthermore, to note instances in which the histories first offered by patients might be misleading because of delirium, mental incapacity, sensory impairment or lack of fluency in English. A good doctor takes good histories – and senses when a history, even when taken diligently, doesn’t “add up”. This isn’t a simple task. In hospitals, histories are taken on multiple occasions by multiple junior and senior staff members.
“Such a fascinating case! It makes me remember cases very similar to this where I have been led down the wrong path.”

“It is such a common story for something to be misidentified in a discharge summary - then copy and pasted into an admission - then into another discharge summary - without it ever being verified as correct. And when the diagnoses are stigmatising conditions it may well restrict the level of active treatment that patient gets in the future.”

“This case highlighted the importance of documentation and handover, especially when a new diagnosis or treatment recommendations are made. It also highlights the importance of looking deeper into the information given to you about a patient. That is, to actively question the diagnosis and management until you are reassured it is reasonable and correct.”

“The case and commentary reminded me about the importance of clarifying a patient’s past history before documenting it – that we should never simply copy what has been written in previous notes.”

**FURTHER READING**

