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From the mind to the hands

■ **There are times when the unseen becomes seen. Two recent events highlighted this for me. The first was an evening telephone call about a 10 month old with a rash, asking: 'Could be measles?' The second was a patient asking if I was worried about her blood sugar levels (BSL), which had become elevated in the past month. Common general practice questions; however both made me stop, consider what had happened in the mind, and the process of arriving at the answer to the questions posed.**

The questions that one asks on these occasions help to clarify the processes that you are usually not aware of as the mind ticks over. The possible measles phone call provided a potential diagnosis (or hypothesis). The good or bad news is there was a starting place. Good because if it is the correct diagnosis it is very likely to be retained; bad because if it is incorrect there is still a significant chance the incorrect diagnosis will be retained.¹ Regardless, the information sought over the telephone aimed at confirming or refuting the diagnosis. The child was not that unwell, did not appear to have had a prodrome, had no known measles contacts, and the clincher was that the immunised 2 year old sibling had the same rash. While there was no diagnosis, there was confidence it was not measles.

The thought process in this case followed a hypothetico-deductive strategy, getting to the point where the hypothesis was excluded. I may not have known what it was, but I knew what it was not.

In the second case there had been thought and decision about management without explicitly discussing the BSL. The patient's question provoked scrutiny of how the decision was made. It took a while to work out what had happened in the mind – in part because there were multiple things occurring simultaneously. There was prioritisation – my highest priority in this octogenarian patient was to avoid her renal failure getting to the point of requiring dialysis – which is also her (and her renal physician's) highest concern – hence, circumspection about medications which may affect renal function. Upsetting her multiple other stable pathologies appeared in this thinking. The diabetes assessment was also subconscious – the last HbA1c was the first to be just above target, home BSL were not particularly high and the patient had recently been less active due to an infected leg wound, which was almost healed. The assessment had been that the problem may be temporary, was not critical to manage

today, and could be reassessed in 1–2 weeks with more information. The risk-benefit analysis had occurred, but initially only the final outcome could be articulated.

In this case there had been nonanalytic reasoning occurring, but the question from the patient had provoked a move to provide an analytical framework for the decision making, which can occur when there is ambiguity.² The question caused reflection, which has been shown to help the accuracy of diagnosis in complex cases.³ The reasoning had included contextual issues – important as contextual errors and biomedical errors can both be sources of medical errors when individualising care.⁴

All of these complicated processes with back up mechanisms happen in a routine day for a general practitioner, but the complexity is often not recognised or acknowledged. It happens in the mind, but the output for posterity is what the hands type in the notes and the paper generated from that.

In this issue of *Australian Family Physician* we look at hands and feet – the parts of our body that act not think! Baquie et al provide a framework for assessing foot pain in all age groups. Scarff provides an update on the management of hyperhidrosis of the hands or feet. Conolly and McKessar provide some suggestions about how to assess if carpal tunnel syndrome is work related; and Sirisena and Williams provide an overview of the causes of hand tremor.

We hope this month's articles can help you in your practice, whether you realise how your brain uses the information or not!

References

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