Clinical examination in three minutes?

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My younger, hassled colleagues often grumble to me that they have no time to do anything. In contrast, Charles never appears hurried and yet seems to have read every book there is, and, as the Americans would say, 'has done the world' before he was fifty rather than as I hope to do during retirement. So, after another frustrated outburst I thought I would see if Charles could offer them any advice and approached the subject over dinner when we were joined by my old friend Benedict, a distinguished retired physician.

'Well they had time to grumble to you!' *was Charles's immediate response.*

'That's very harsh, Charles!' *I said, rising to their defence.*

'Maybe!' *he replied,* **'But true nevertheless.'**

One recent outburst by a particular doctor was out of character. This precipitated my action in raising the matter. I explained this to Charles.

'Fair enough, Coe!' *he replied,* **'Your colleague may have been under extreme and recent pressure, but whether it be his temporary aberration or others' constant grumbles, these thoughts do occupy time better spent elsewhere and engender a state of mind incompatible with efficiency. This is the basis for a vicious circle that may go unrecognised by both parties, but particularly by employers. Nevertheless I accept there is a major underlying and increasing problem.'**

'It certainly is, Charles, and largely not of our making!' *I interjected.*

'Coe, it is too easy to put all the blame on bureaucracy and paperwork! Some increase in the latter is inevitable and might even be justified. Have either of you any suggestions as to how our friend might find more time when he is doing what he, and we, feel he should be doing?'

'He might look at physical examination, Charles,' *replied Benedict.*

'He is certainly very thorough with it!' *I said.*

'Go on, Benedict, you may be on the right track,' *said Charles.*

'When I was a student, I was privileged to be taught by one of the most original and brilliant thinkers of 20th century medicine, the late Professor Moran Campbell. Moran taught that you could do a complete physical examination in three minutes.'

'Including neurology?' *I asked.*

'Yes, including a full neurological examination!'

I could not restrain myself, 'Absolute nonsense, Benedict. You know as well as I do that that takes the best part of half an hour!'

'Calm down boys!' *Charles interjected,* **'I suspect that you are not starting with the same premise.'**

'To be fair to Moran, he was assuming that there was no prior probability of abnormality and was not allowing for the time taken to elucidate the unexpected. Nevertheless, his approach proved life-saving when I realised I had not left enough time for an incidental physical examination in my long case in the old-fashioned Membership!'

'I suspect he went for manoeuvres that are wide ranging but nevertheless sensitive and specific in the statistical terms.' *As usual, Charles was right.*

'Moran argued that you take full advantage of incidental observation and then go for examinations that are highly sensitive and preferably dependent on two or more different pathways, for example the reflex arc, and, if the results are normal, exclude abnormalities elsewhere.'

'I presume a good example of incidental examination is watching a patient walk in and then undress?' *said Charles.*

'And you might say that asking someone to stand on one leg with their eyes closed constitutes a full neurological examination!' *I suggested.*

'That's the idea Coe, but far too many false positives!' *Benedict responded and continued,* 'Nevertheless to achieve the three-minute target the neurological examination is most in need of pruning. It gives the best example, though the principles can be applied elsewhere.'

'What were his specific recommendations, Benedict?'

'"Recommendations" is not the right word, Charles. He emphasised that the plan must be a personal compilation based on obsessive physical examination during one's early professional life followed by repeated revision later, so that one had utter confidence in recognising the normal.'

'But he must have made some suggestions?'

'Yes, to give a non-neurological example, gentle general palpation of the abdomen should be followed by percussion and, if normal, specific palpation should be restricted to the kidneys.'

'And the neurological examination?'

'Incidental examination covers most of the cranial nerves, so examine the fundi, look for nystagmus, noting pupillary activity, test for suppression in the temporal visual fields, the finger-to-nose test with the eyes closed, the ankle jerks and test position-sense by minimal movement of the little toes and vibration sense at the most peripheral point of good contact. You might then ask him to stand on tiptoes and on each leg in turn. Less than one and a half minutes and if these tests are normal I would say there is a 99.9% certainty of no neuromuscular abnormality! If the patient does not have specific symptoms what might be missed!?'

I ducked the question, 'Why the little toes? What if he gets it wrong, Benedict?'

'Little toe may be going a little too far, but you might check using the great toe. However, if position-sense is absolutely normal in the little toe you can be sure that posterior column function and relevant cortical function are all normal on that "side". It's also important to know your next move when under pressure and surprised by an unexpected abnormality. For example, what would you do next if the ankle jerks were both unequivocally pathologically brisk?'

'The knee jerks?' *I suggested.*

'No, I am sure Moran would have said the jaw jerk and allowed the pectoral jerks.'

'I think I see why. But is this approach acceptable?'

'Why do you do a physical examination?' *Charles interjected.*

'To confirm and elucidate findings anticipated from the history, to check for unexpected relevant signs and to confirm the absence of incidental abnormalities, in that order,' *I suggested.*

'Do you agree, Benedict?'

'I am sure Moran would have put patient expectations and honing your skills for the occasion when they were really needed ahead of all three. After all, even in the days when cardiologists had to assess the severity of aortic stenosis by physical examination, it was accepted that less than 15% of clinical information came from physical examination!'

'I am sure your first point gets to the crux of the matter,' *said Charles.* **'Did you hear the story of the distinguished but supremely self-confident neurologist? The opposing expert in court had given a long and convoluted opinion claming that he had examined the plaintiff for more than an hour. The neurologist gave his opposing view succinctly and to the point. On cross examination, the plaintiff's counsel asked, "Dr A, how long were you with Mr C?"**
The neurologist replied "Ten minutes!"
"But Dr B examined for more than an hour!"
"It may take Dr B an hour and a half to come to the wrong conclusion but I only needed ten minutes to come to the correct one!"
The judge's expression confirmed the plaintiff's case had collapsed.'

'So the skill is to be able to examine thoroughly and accurately, but also as briefly as possible; still leaving the patient convinced that he has had a fair crack of the whip!'

'That's right Coe!'

The above is much truncated. Benedict and I argued long and hard over the suggestions made and came to numerous alternative conclusions, much to the bemusement of Charles. But as Benedict said later, was Moran simply describing in an extreme way what we do every day of necessity in outpatients? As Moran emphasised to his students, however, quick examination will work safely only if one's own tactics are developed slowly on the basis of years of careful and full physical examination at every opportunity.

Coemgenus