Breathlessness: ask the right questions

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I had just come back from a very frustrating day at the clinic where everyone was complaining of breathlessness, but they seemed to have little or nothing the matter with their heart or lungs. I vented my frustrations on Charles.

'Why do people keep on telling me they're breathless and yet there's little or nothing wrong with their heart or lungs?'

'You could well ask my wife that question,' Charles replied, 'and get short shrift. She's been accused of hyperventilating by various young locums at her GP's and now an experienced GP tells her she's got asthma. She's very angry. She's threatening to sue them and I'm doing my best to calm her down.' He looked thoughtful for a moment and then said, 'I wonder if both your frustrations are more closely connected than you think.'

'What do you mean?' I said.

'As always in life, you've got to ask the right question. You should have been saying, "What is the job of the heart and lungs, in the context of exercise?" and my wife's doctor should have asked, "Why are people breathless?"

'But aren't I entitled to ask why someone is breathless if that's what he's consulting me about?'

'Yes,' he said, 'but it was you who chose to put the emphasis on the heart and lungs, and therefore your first question should be about the heart and lungs, and not breathlessness. I would suggest to you that the function of the heart and lungs in this respect is to enable the legs to work properly. Therefore the relevant symptoms might be weakness of the legs or slowing of the gait, just as when the engine of a car is failing the car slows down.'

'Fair point,' I said.

'What about the second question?' he asked. 'Why do people feel breathless?'

'Well, as I understand it, breathlessness is to do with the perceived need for respiratory effort.'

'If it is a perceived need,' he said, 'I would anticipate the symptoms to vary very much from person to person.'

'There may be specific reasons,' I said, 'such as exercise-induced asthma, or if the lungs stiffen up as they do when the heart fails. One can also be breath-

less because of build-up of acid in the blood, but in fact most people stop because of breathlessness long before that happens.'

'I'm not surprised. If a person were breathless because of acidity of the blood, I would expect the legs, the source of the acid, to complain first, like the heart in angina.'

'That is logical,' I replied. 'Sometimes people do complain that their legs get tired, but we tend to consider that a "non-organic" symptom.'

'Unless you're an athlete? To my mind, tired legs are likely to reflect the body's potential more accurately than breathlessness.'

'So you think we should ask how far someone can walk and why, and suspect that exercise would not be physiologically limited if the reason is "breathlessness"?'

'Yes.'

'I see what you're getting at, but what has that got to do with your wife's problems?'

When the perceived need to make respiratory effort is greater than necessary, the effort itself might seem inadequate, or produce sensations that themselves induce more effort, thus setting up a vicious circle.'

'Effectively hyperventilating?'

'Yes, if exercise can do this in people who are comfortable at rest, then perhaps you should look for a cause in those who do it "spontaneously". Perhaps any factor, even an apparently trivial one, drawing attention to breathing might precipitate the vicious circle.'

'So if a person over-breathes you should look for the initiating factor and beware of making hyperventilation the prime diagnosis?'

'Yes,' he said. 'If you want to know what the physiological limitation of a person's exercise tolerance is, the legs are more likely to tell you than the chest. On the other hand, I am sure that there must nearly always be something to set off the breathlessness in most people who "hyperventilate". I think my wife was justified in being cross.'

'Touché; breathlessness is nearly always hyperventilation, but hyperventilation nearly always has a cause.'

Coemgenus