“The time has come” the walrus said . . .¹

Medical training, especially of undergraduates, is currently undergoing critical review.²⁻³ The pressure for change is strong and results from the need to reduce the overwhelming burden of factual knowledge²; prepare doctors who can manage common conditions²⁻⁴; develop solid grounding in fundamental clinical and scientific skills²⁻⁴; and produce an adaptable mind that can respond to future developments.² Against this background it is suggested that current awareness of locomotor disease among house officers and junior medical staff is low,⁵ possibly reflecting deficiencies in training. Now may be an opportune time to correct this.

What evidence is there of a need for heightened locomotor awareness? Locomotor disease is prevalent⁶ and accounts for a major source of disability in later life.⁷ At least 10% of a general practitioner's time is spent dealing with it⁸—an important fact as 38% of medical graduates will probably enter general practice.⁹ Not only common in the community, rheumatological disease is also common among hospital inpatients.⁵⁻¹⁰ Here it is often seemingly overlooked by medical staff,⁵ both when occurring coincidentally and when entering into the differential diagnosis of the presenting complaint—for example, the ruptured Baker's cyst, inappropriately treated as a deep venous thrombosis.

At this point it is necessary to consider the role of the house officer, comprising as it does two important components: service and training. Training does not finish at graduation and the house officer years, both pre- and postregistration, should be a time for consolidation and development of clinical skills.² As locomotor disease is prevalent and will probably form a considerable proportion of the house officer's future workload, this aspect of internal medicine requires emphasis and reinforcement. Lack of rehearsal of locomotor, or indeed other skills, during these years may produce 'blind spots' in later clinical practice.

Regarding service, two types of house officer clerking have been propounded—the 'screen' and the 'rapier'. The 'screener', is required to make a thorough assessment of all body systems to detect the presence of disease and disability. The 'rapier' adopts a honed approach, centring on elucidating and treating the presenting complaint. There has been discussion on the relative merits of both approaches. The 'screener' may arguably develop a non-selective, checklist approach, which diverts time and energy from the problem in hand. The wealth of detail that could be generated might obscure the 'wood' with the 'trees' and, moreover, this is not the approach adopted by senior clinicians.¹¹⁻¹² Proponents suggest that it encourages the viewing of the patient as a whole, generates opportunities for positive health intervention, and breeds familiarity with the wide range of human responses and problems.¹³⁻¹⁵ In contrast, supporters of the 'rapier' claim that diagnostic skills are developed better by encouragement of hypothetico-deductive reasoning.¹¹ Detractors argue that this is at the expense of overlooking important but unrecognised additional problems¹⁴⁻¹⁵; a significant proportion of inpatients have locomotor disease that will hinder or delay discharge.¹⁰ Indeed, in two Nottingham surveys there were many instances in which clinicians seem to have been unaware of, or perhaps thought it not important enough to record, the fact that patients were unable to walk.⁵⁻¹⁶ This would seem an important omission.

Whichever approach is deemed most appropriate, at present neither seems to be fulfilling its objective: the 'screener' is overlooking significant locomotor problems⁵ and the 'rapier' is not appreciating the locomotor aspects of

general medical disease.⁵⁻¹⁶ An example from one of the Nottingham surveys¹⁶ which exemplifies both deficiencies is that of a 26 year old man presenting with ulcerative colitis, where no mention was made of his recent onset, severe, disabling arthropathy.

Why are there these shortcomings? Many of the reasons remain speculative. The locomotor system is complex and a belief that adequate assessment is time consuming may act as a deterrent. In addition, lack of confidence in locomotor skills or overreliance on laboratory and radiographic investigations as alternatives to clinical inquiry and examination¹⁷ may also contribute. These aspects may reflect poor undergraduate teaching. A local survey of house staff suggested that the locomotor system was given low priority, most believing that locomotor assessment was routinely undertaken by nursing and paramedical staff and, by implication, was therefore not a house officer's responsibility. That such omissions were often not corrected by senior medical staff suggests a deep rooted problem, possibly perpetuated by successive generations of students and teachers.

Whatever the reason for non-assessment, several consequences arise. Foremost is the frequently missed opportunity for health intervention,⁵ but of equal concern is that constant de-emphasis of the locomotor system may produce a downward spiral of decreased awareness of the importance and treatment of rheumatological disease. Indeed in our survey a perceived lack of effective treatment was often given as a justification for non-assessment.

Having identified the problem, how can it be tackled? We suggest that a concerted approach is required, aimed at creating effective 'screeners'¹⁸ who can, when necessary, arm themselves with a 'rapier'. Although it may be argued that a 'screen' reinforces the bludgeoning approach of the system inquiry,¹¹ we believe it can be valuable, particularly in the early stages of training. Constant use serves to heighten awareness of the incidence and spectrum of locomotor disease and normality,¹³ and, if combined with a functional assessment, emphasises the need to consider the patient in context.

A screen is not a panacea, however. Identification of a problem must generate an appropriate response and skill in regional assessment, and knowledge of common rheumatological conditions is also required. Many methods of regional assessment are available, but there is little direct evidence of their relative diagnostic sensitivities and specificities. What is clear, is that lack of reinforcement and use of a clinical skill leads to its deterioration. Regular use of a 'screen' to detect and heighten locomotor awareness, coupled with training in regional examination, should enable the development of medical graduates who are reliable 'screeners' but who are also armed with a hidden 'rapier'. Continuing postgraduate training can then hone and sharpen this 'rapier' as further experience and knowledge are acquired.

When should training in locomotor skills be undertaken? Current data suggest that rheumatological teaching is heterogeneous, with wide variation in time allocated to the subject (0-8 weeks).¹⁹⁻²¹ Rheumatology is often treated as a specialist subject,¹⁹⁻²¹ which perhaps serves to marginalise it. Additionally, within rheumatology, there may be an over-emphasis on the comparatively rare diseases which occupy rheumatologists²² rather than on the common soft tissue problems and osteoarthritis that occupy non-rheumatologists.⁶ This is at odds with current recommendations²⁻⁴

that emphasise the need to concentrate on common conditions and their management. Restructuring of the curriculum with emphasis on scientific principles and clinical skills seems appropriate, not only for those intending to become general practitioners but also for those who will need flexible minds, uncluttered by obsolescent facts, but guided by sound scientific principles.²

Many basic aspects of ‘rheumatology’ should thus be included in the undergraduate core curriculum, and it seems inappropriate to relegate such teaching, as currently is often the case, to a single specialist slot in the second clinical year.^{19–21} Rheumatological conditions offer excellent vehicles for teaching skills, attitudes, and knowledge that have relevance and implications far beyond rheumatology as a specialty subject. Repetition and reinforcement of basic musculoskeletal elements throughout the undergraduate programme might have the additional benefit of emphasising to other clinical specialties the pervasiveness of rheumatological disease. This would not just be one way traffic: reinforcement of general medical aspects of rheumatology, for example, would also be welcome.

Finally, how do we emphasise the importance of core aspects of rheumatology? We suggest, as have others before, that the examination ‘stick’ is important.¹⁹ The current situation, whereby rheumatology is often not included in final assessment, cannot continue.²¹ Furthermore, if we consider clinical skills important then the current emphasis on factual knowledge²¹ is misplaced. Not only do we need to wield an examination stick^{19 20} but also it must be wielded *often*, throughout both undergraduate and postgraduate training, and wielded *precisely*, with concentration on clinical skills, principles, and basic knowledge. This should not be seen as a recipe for producing strait jacketed, cloned iatroblasts, but for giving house officers solid ground from which to launch their careers in whichever direction they wish.

Will revision in the curriculum occur? It is to be hoped that this question does not belong to the same category as ‘whether pigs have wings’.¹

We are grateful to Dr Jo Edwards for first suggesting to us the use of the term ‘rapier’.

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