

Personal Paper

Examanian — North American style

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Deciding to return to North America and re-emigrating to Canada in late 1975 presented no problems of licensing, since I had taken the LMCC 17 years earlier and had received FRCP(C) as a late sequel to passing the certification examination in anaesthesia. Then, of course, the LMCC format was of essay-type questions, and included orals and clinicals.

When I fell into the chairman's position a few months after arriving here, there was a department to restaff, a residency programme to develop, a daily commitment to the operating room, some participation in the intensive care unit, and a little spare time to settle into a new environment. Gradually, with some encouragement from friends there, I moved to a point of decision: to get licensed in the States. I had known for years about the Educational Commission for Foreign Medical Graduates (ECFMG; required of all graduates of medical schools outside the US and Canada), and the Federation Licensing Examination (FLEX; the uniform state licensing exam), which would have to be taken. However, by late 1977, US laws on medical immigration had been tightened, and the first Visa Qualifying Examination (VQE) had been "offered" to some 4611 foreign physicians who did not have a state licence and were not practising "on the day" (10 January 1977).

Ominous statistics

When I was given the opportunity to go to a post in a well-known mid-West clinic it was not clear to me (or to others, I think) whether a certain escape clause could be exercised. The issued statements referred to individuals "who are of national or international renown in the field of medicine." I suspected, and still do, that the criteria for waiving VQE in such instances had not been defined, and a decision would be reached only by unique responsibility, probably at the highest administrative level. I decided, therefore, to press ahead and take the examinations. Success in VQE would mean that ECFMG was not required; on the other hand, the ECFMG was essential if my sponsors were to negotiate with the Immigration Department (and if I had not then passed VQE).

By early 1978 the impact of the first VQE was becoming known, as was the plight of those foreign graduates who had passed both ECFMG and FLEX and had practised previously in the US but could not return without passing the VQE. It is set up as a two-day examination, comparable in standard to the National Board of Medical Examiners, parts 1 and 2, although somewhat shorter. The first day, therefore, tests knowledge of

all seven of the basic science subjects taken by first- and second-year medical students. The report on the 1977 exam revealed that the pass rate was 25% and that this was also the figure for day 1, so that many of the 67% who were successful on the second day did not pass. Also, no marks were released to the candidates. As ominous as these statistics were the impressions given to me by several younger colleagues who had been staggered by the difficulty of the 480 basic science questions, randomly arranged throughout that first day, with 45 seconds on average for each answer. At least I had been warned, and assumed from the start that serious study would be needed.

I decided in January 1978 to complete the documentation required (a considerable effort) and take in sequence the four examinations scheduled for that year: English test for VQE, 5 April (my first, lighter, introduction to multiple-choice exams); ECFMG, 26 July; VQE, 6-7 September; FLEX, 12, 13, 14 December. At least the order was logical, although the most taxing ordeal might lie in the middle. I had graduated in medicine at 21, I was now 52. In the intervening years, spent in clinical anaesthesia sometimes combined with two days a week of laboratory research, I had scanned the *BMJ* and *Lancet* regularly, and had probably kept in touch with progress in most clinical and a few basic disciplines; in anaesthesia and research I had been closer to physiology and pharmacology than were many colleagues in other specialties. If these were assets then the liabilities were that subjects such as immunology, genetics, and microbiology were almost new to me, that I had never found anatomical or basic biochemical facts particularly congenial or easy to recall, and that many fields of clinical work were more familiar as an observer of others' activities than as a direct participant—in diagnosis, for example.

Educated guessing

In this informal environment I could learn about the style and likely content of the US licensing exams from the several foreign residents who had taken FLEX. It was reassuring to know that marks were not deducted for wrong answers, "educated guessing" being encouraged. My initial reading list was based on the suggestions of the successful, and the texts were almost all North American. Here, the examinee is aided by the many handbooks devoted to hundreds of multiple-choice questions on a single subject or groups of related disciplines. I found most of these to be of great value; they give practice in answering multiple-choice questions, and can be picked up and marked in spare moments; when a series of questions is answered correctly from conscious knowledge or by educated "guesstimate" confidence is acquired; most important, these exercises continually point out the gaps in knowledge. In my view, the best way for the postgraduate to study for this type of exam is ruthlessly to search for what one does not know and try to fill each gap. The corollary is that to read a textbook from cover to cover is a waste of time. Of course, the exception has to be when one remembers or knows almost nothing about a subject, as in my case with basic biochemistry and virology.

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The extra funds generated by daily working in the operating room permitted me to acquire a temporary library of many books of multiple-choice questions, and from February onwards I started each day at breakfast by reading and marking one or other of these, picked up often at random. This practice, and making notes from the more formal texts, were my study methods. Some extra discipline was needed, so from May until early December I was at my office desk from 7.45 am for four to five hours on Saturdays and Sundays. This time was spent in writing notes or summaries, mostly in biochemistry and immunology. Several mnemonics resulted to cope with the Embden-Meyerhof pathway, the Krebs and urea cycles, the characteristics of essential amino-acids, purine and pyrimidine bases, DNA-containing viruses, etc. These notes were to be my reference material in the final days before each exam. Other than the weekend mornings—made tolerable, even pleasant, by CBC FM's music-programming—time for study was erratic; but the marvellous, if short, summer encouraged informal periods of revision in the garden's sun or shade. Before each exam, I studied full time for a week or so at home to increase the intensity of the note-taking. Thus 1978 was a year to remember, but not for exotic vacations.

The medical world has long known the ECFMG as a mainly clinical exercise, with 360 questions and enough time to answer. As with other North American examinations, the marks are scaled according to the performance of students of US medical schools (usually in the same year). Whereas 75 is a bare pass, 80 indicates that more than just five additional questions have been answered correctly. I did not find ECFMG easy, and on this occasion there seemed to be an excess of obstetrics and gynaecology, and a frequent need for educated guessing. There were two or three questions on anaesthesia, a particularly devious one being answered wrongly (I think) by several mature examinees and also by colleagues in my own specialty to whom I directed it later. I mention this to suggest that the introduction of the very difficult VQE may have resulted in a tougher ECFMG (in fact the failure rate is substantial); otherwise, to give one example of possible inequality, the lucky member of a husband-wife partnership who escapes VQE (only one requires this to secure a visa for both) would gain entry at a different examination standard.

Days to remember

It was possible to take ECFMG here in St John's. On that glorious July morning, as the British balloonists were ascending slowly eastward beyond Signal Hill, I drove in, not without embarrassment, to sit in a lecture theatre where I am not usually a student. That was the first "day to remember." It was different for VQE, which required a trip to Toronto. Summers here should not present travel problems, but a strike by Air Canada did just this, about two weeks before the exam date. So I took the first available booking on the "local" airline to Montreal, proceeding to Toronto by rail in the old-fashioned way, and weighed down by far too many books. The fates had arranged, without my intervention, that my hotel room had a kitchen annexe, and with the desk suitably placed I passed all of six days—interrupted only by a half-hour's swim each evening—within these walls. To learn all these basic subjects really well was impossible, but was I going to know enough?

The first day of VQE was as tough as I had come to expect, and I cannot fully describe its repeated assaults on memory, stamina, and pride. After the starting session of, I think, 160 questions in two hours, small groups of dazed, shattered MDs, several close to my own age, stood silently in the corridors outside the exam room. It was striking that many (around me were a number of UK graduates) appeared to have been psychologically unprepared for the form that the examination would take—penetrating, basic, unrelenting—and admitted to not even understanding some of the questions. For my part, it was little enough reassurance to be able to follow the wording—but were

acyl protein carriers used in fatty-acid synthesis or oxidation? What was the blood supply of the lateral surface of the medulla? Did I know the difference between pre- and post-synaptic inhibition? I was aware of Ouchterlony plates, but that diagram looked much more complicated. Among a few basic questions on anaesthesia, one would have tested the understanding of our more junior residents at least. These, and the brief pleasure at being able (I think) to translate a DNA into a RNA purine-pyrimidine base sequence provided the occasional boosts to confidence, hinting that I might just get enough marks in this thoroughly formidable academic exercise.

The second day of VQE (again about 450 questions) was similar to ECFMG but more difficult, I believe. I returned to St John's in a mental haze, mute, uncommunicative about the exam, wondering whether this was the state of mind of soldiers on leave from the battlefield. There still remained the hurdle of FLEX. After a few days I resumed my weekend note-taking, concentrating—perhaps mistakenly—on areas which VQE had exposed to my discomfort. For FLEX an application for licensing is made to one state, the regulations of which may vary in regard to the time requirement for North-American training, necessity to have ECFMG, etc. The exam is then taken in that state. Maine is more popular and straightforward than some, and I arranged to travel there, again with a few days to spare to allow a work-up, and in case of December fog here.

The three days of FLEX started with 540 questions on the basic sciences; these were similar to day 1 of VQE, but lasted longer, although the ordeal seemed less strenuous. In certain subjects, including biochemistry, I might have done better had I not been brainwashed by the basic scientific probing of VQE, instead broadening my reading in more clinically relevant directions. Despite more questions in FLEX, day 1, several areas (some mentioned above) which had been exposed in VQE were not mentioned; I do recall a whole page of chemical formulae, however.

The second day included all the clinical sciences, again 540 questions set out randomly, and was similar to day 2 of VQE, more comprehensive than ECFMG. Quite different was the third day, apart from an initial 90-minute session of 130 questions on treatment. In the second session of 160 minutes, which I prefer now to forget, there was a succession of radiographs, scans, photographs, histological sections, cystometrograms, etc; the endurance test, which FLEX clearly is, was beginning to be felt, and for some moments I began to lose control, becoming unnerved as time pressed too hard. The grand finale—the "rub-outs"—came after an interval for lunch; in these, a case history is given and there is a list of questions to be asked of the "patient," answers to be sought from the laboratory, or treatment to be suggested; these may either be expected (and therefore correct), or inappropriate. The choices "rubbed-out" by the examinee bring out positive, neutral, or negative indications for proceeding to the next step. This is the only section of these exams where marks are deducted (the marking is such that credit is given both for correct selections and for ignoring the others—in effect, marks are lost for wrong choices). My preparation for this had not been extensive, but I had listened to others with experience, and had read the instructions and practised on the test books which are available even for this. I had become aware that the ordering of multiple diagnostic tests ("just-in-case") would probably be marked down, a point which may seem at variance with the trans-Atlantic view of American medicine, but which may now result partly from economic forces.

That this approach was probably correct (it is also emphasised in the FLEX instruction booklet) may be supported by my own performance, in which I dealt with the 21 case histories (10 minutes each for diagnosis and treatment) by suggesting only what seemed necessary at the time; thus, it would not be advisable to order an ECG in a previously healthy 21-year-old patient with pain in the right iliac fossa—a crude example, admittedly. The third is the only day of FLEX for which a single mark is given; for each basic and clinical subject on the other two days a

separate score from the 77-90 questions each is issued. The overall FLEX mark (75 is a pass) is an average of the three days, but weighted so that days 1, 2, and 3 account for one-sixth, one-third, and one-half of the total marks respectively.

Bout of examania

Endurance test: yes, I thought, enough to deserve a certificate just for answering all the 1300-plus questions and 21 "rub-outs," spread over 22 hours. Now, looking back on this extraordinary bout of "examanian" covering 21 weeks, three exams over 6 days, some 2600 questions, I ask (and so must the reader): why, how? All that I can answer is that the motivation came, time was found to study, and that perhaps this informal environment made such an endeavour feasible. Being in North America, influenced by those who have studied for and taken successfully ECFMG and FLEX, was a help and stimulus, of course.

Through it all, however, I was reminded that an exam is an exam is . . . , etc, regardless of age and experience. Away from home, just before VQE and FLEX and on the days, I fell asleep long before my usual hour, and arose in the early morning, apparently anxious to do that characteristic last-minute revising which may focus the mind but is otherwise largely unproductive. Also, the tension in the minutes preceding each session, especially the first, was much as I remembered it from student days; whereas now only a few largely predictable events will raise my heart rate, the tachycardia of earlier days was certainly present when waiting for the questions to be distributed.

As I write this, I think of those doctors and others who described their disabilities so candidly in that well-known series of articles. Could the basis of the "examanian" have been any of the following?

Pathological—A psychiatrist colleague, hearing that I was contemplating this exercise, muttered something about atheroma of the frontal lobes.

Immunological—Crossing disciplines fictitiously, had I developed "psychological antibodies" to an excess of time in the essentially practical and unintellectual environment of the operating room?

Pharmacological—Although the operating rooms do have effective exhaust systems, were trace concentrations of anaesthetics responsible?

Psychiatric—Here, we become more realistic. Was it denial—of age or possibly of declining intellectual ability? A persisting streak of masochism, a continuing need to justify existence? A substitute for original ideas? An illusion of achievement? Throughout the saga, it must seem that necessity has been made a virtue.

Or was it physiological? In common-sense terms (still a useful basis for successful "guesstimates") is it just that some of us are perpetual students, needing the stimulus of studying and learning new facts every few years? We may actually enjoy the process.

Limitless field

My response to colleagues who say: "I just couldn't do it," is genuine disbelief (the number who have refrained from all comment are more self-revealing). On the other hand, with it all completed, I find the whole business unbelievable and can only demur to say: "Someone else must have done it, not I." But my notes are still around me, pages and pages of biochemistry, immunology, infectious diseases, physiology, medicine, and I am too possessive about them to feel like giving them away to make things easier for someone younger and probably cleverer. I am losing my idea of making them into a polyglot publication, since the world is already full of such things. But, surely, to write a book, academic or otherwise, would have been more worth while? There may still be an opportunity. After all, the ophthalmologist author of *Coma*, so convincing with his plot of anaesthesia mischief and in his description of the environment of the operating room, showed with a few wild drug doses that the pharmacology went unchecked.

Now, dear reader, in spite of this marvellously educational, if enforced, refresher course, I have a much clearer idea of what I still don't know in the almost limitless field of medicine.

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STRANGE ENCOUNTERS

References—confidentiality

It is usual for the letter requesting a referee's opinion to state unequivocally that the reply will be treated in the strictest confidence. It may even be explained that the reply will not be copied, and that it will be destroyed as soon as the appointments committee has completed its business (destruction, one may remark, that honourably and in good faith could come to be regretted).

To my own knowledge, and not 20 years ago, the blank side of spare duplicated copies of referees' letters, no longer required for their original purpose, served—cut in half—as an economical supply of doodling paper in a regional board's committee rooms, whether the committee in session was dealing with appointments, the design of laundries, or the annual budget. Those attending, when bored, could be seen sorting and pairing the half sheets so that they might read the reconstituted and confidential whole. Once, triumphantly, one medical member of an appointments committee thus discovered a referee's letter relating to another member of the same committee who, some months earlier, had been on the other side of an interview: the episode proved not to be as lighthearted as the discoverer of the document may at first have expected.

A rare, real disadvantage of distributing copies of referees' letters is the chance of disclosure to a candidate, during his interview, of a referee's views and comments. A committee member who was called to order by the chairman for making such a mistake proved to have been under the impression that, as the letter was about the candidate, there could be no breach of confidence in quoting to him from it.

Once, a non-medical member of a committee concerned with a medical appointment said to a candidate to whom he seemed to have taken a dislike, "In his letter about you, one of your referees, Pro-

fessor ———, says, and I quote, 'He is a good party man.' May I take it from that most explicit comment that you admit to being a member of a certain political party?" The questioner had not realised that the professor from whose letter he had quoted was himself a member of the committee and present at the time. The professor, with the chairman's consent, intervened, introducing himself to his interpreter and then reminding the committee in general that the context of the remark under discussion should have indicated to any one other than a disciple of US Senator Joseph R McCarthy that it related to the candidate's participation in the social life of the medical school. Even the candidate laughed; only his interrogator came out of the interview badly. It was in the 1950s; it could have been today.

On another occasion, the head of a faculty of science who was representing the senate of a university at a meeting of a selection committee said to a candidate for a preclinical appointment in the medical faculty, "It is mentioned in Dr ———'s letter about you that your father was a Fellow of the Royal Society. You do not mention that in your curriculum vitae. What are we to make of such an omission? Did it not occur to you that such a distinction in your family is an obvious asset to you as an applicant for this appointment?"

The chairman did not intervene, perhaps recognising that this solecism on the part of a member of his committee was best left to the candidate to deal with. The candidate was silent for some moments, then replied quietly, addressing the chairman, "I am sorry if I seem to have neglected my parents by not mentioning them in my application, and I hope I do not seem ungrateful to Dr ——— if I suggest, respectfully, that what he has written about my father is not relevant to my application for the lectureship." It was a brave reply, though, inevitably, it sounded rather pompous.—WILL MACREDIE.