Nora a lot of misery and pain. When he found out about their rejection of him he thought seriously about setting the McCawley household on fire with all of them in it.

Relief in hunting

Noel got some release from persisting resentments when he took off into the countryside to camp and hunt. With growing insight he thought he was safer on his own and the hunting, at which he quickly became skilful, satisfied something in him, relieved him. It wasn't that he needed all that he caught or that he enjoyed and contrived a slow, painful, cruel death for his prey, but the exercise soaked up a lot of aggressive energy, leaving him more at ease, sated. All of that had gone on before and he was already a moulded fighting machine with aggressive energy to burn when the accident exploded.

He had terrible trouble trying to master the artificial limb. They eventually fitted it, if fitting is what you call clumsy, ignorant, painful strapping of lifeless steel and leather to a living, angry stump. He hated every hand that touched him, every tape that measured him, every eye that glanced his way in the limb fitting department. The technicians had seen a lot of reactions in their time, but nothing ever like the killing looks of Noel when he quickly got fed up with their impossible struggle to restore function that would never approach normality.

The new limb hurt the old one and in warm weather it got hot and sticky. It creaked and snapped and announced his disability even before his limp came into view. He was angry with those who decided to risk talking to him about his accident and suspicious of those who didn't, who pretended they noticed nothing. Anyone who seemed genuinely interested in him was banished with insult or threat.

He was not about to discover religion or anything stupid like that, but he would fantasise a voyage to Lourdes, a plunge into the healing waters and a re-emergence complete and restored, never again to seethe, never again to limp, never again to hate. Those thoughts became his version of prayer. He didn't believe in his prayers and they went unheeded.

He wrote all of this down so that if something terrible happened he would leave some answers behind. A few drinks made another type of fantasy increasingly attractive. This one included finding a small, quiet business office with three employees. Two young women and a man. The door would lock and the shades go down and the man would die. The women would live for a while as he played a game. They had to give the right answers to his questions to survive. He would start off with simple stuff, moving on to six markers. It was all rehearsed, their death inevitable. It was sick really because what he intended was worse than what he wrote down. He recorded only the major components. He didn't tell about the sadistic torturing that he was getting close to at that stage. Somebody had to pay for Noel's anger and pain.

No one actually saw him jump but plenty saw what was left of him. The 12 storey drop did a good mincing job on Noel and nobody, not even the ambulance crew, noticed his amputated stump. There was no sign of the artificial limb. No sign of it in the street, no sign of it in the jump room. It was gone forever. He was thoroughly successful in destroying himself, that's for certain, but there was more to it than that. His life was gone, finished. Some would say good riddance, but others were alive and would stay that way. That was Noel's sacrifice, his way of offering a prayer that delivered the goods. Noel's resurrection.

This story is based largely on the life and death of a real patient. He and I struggled for years to avoid a killing and he chose suicide, I'm certain, as his contribution to that struggle. A new Noel walked into my office last week.

OK surgical technology

Roy Calne

Surgery is changing as new technologies are introduced and these are shown to be more effective with less morbidity and cheaper than previous therapeutic options. This change has been gathering momentum, not only in surgical specialties, such as endoscopic urology and orthopaedics, but also in laparoscopic and endoscopic gynaecology and interventional radiography. New instruments allow manipulations through natural orifices of the body or through minute keyhole incisions, and orifice and keyhole surgery is now well established. It is also gaining a following in general surgery, in particular for cholecystectomy.

As the equipment is expensive and the technical expertise required considerable it is logical to specialise in a few procedures that obtain the best results. There has been concern that specialisation in medicine would lead to fragmentation, especially as the new techniques require prolonged training and those who have gone through the hoop tend to make access to the specialty more difficult for any but the committed specialist.

But these OK procedures will get more popular. Not only is it preferable for a patient to have minute scars and be discharged back to work a few days after cholecystectomy, but they are manna to those administering health care funds. Nevertheless, several important educational and logistic matters ought to be considered.

- To be an effective practitioner at endoscopic manipulations in the knee joint is there any justification for the traditional training of six years plus an additional preregistration year covering subjects which will have not the remotest practical relevance to the OK surgical techniques? Will community medicine and psychiatry help skilled endoscopic surgery in the knee joint? Similar examples could be cited for each of the OK specialist procedures.
- How can these changes be accommodated to the needs of wide training for the country surgeon in Australasia or the surgeon in a mission hospital in a developing country? Life is too short for surgeons to obtain the appropriate trade union ticket for each of the subspecialties. Moreover, the expensive equipment will probably not be available in small isolated hospitals.
- There will be a need for surgeons with a wider training in centres where the OK surgery is practised, who are able to use old fashioned macro surgery through large incisions—for example, if the portal vein is damaged during an OK cholecystectomy.
- If medical education is to be modified to cater for the needs of OK surgical technology there must be some mechanism to maintain the wider trained generalist who can assess the patient and point out that

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cerebrovascular disease would make intervention in the knee irrelevant or that the patient's diabetes needs control before the gall bladder is removed.

- Some control and balance of remuneration will be necessary so that those with the specialised techniques can earn a good living but not exploit the community with outrageous fees. Audit would be easily achieved by video recordings of each procedure stored in the hospital computer.

There is a precedent for high quality technology in the heart and lung bypass work of perfusion technicians. Although they do not have a formal medical training, they are required to assume major responsibility in the highly technical management of the heart and lung machine and react quickly should any malfunction develop.

Consideration should be given to special training for OK surgery that would lessen the burden on the taxpayer but would be entirely appropriate for the work involved. The current three year BSc course in general anatomy, physiology, and pathology would be a suitable start, followed by a three year training in the area of OK surgery that the student wishes to embrace. Having obtained a diploma in OK surgical technology the students would be able to practise on their own provided that there was cover from a more widely trained specialist. They would be paid according to experience.

There would still be a need for orthodox medical education and surgical specialisation with special arrangements to allow and encourage appropriate training for a country surgeon or a surgeon in a developing country, where there was no access to highly specialised equipment. On the medical side a similar training would be needed for the generalist physician who would need to see every patient referred for OK surgery. A more specialised training would be required, much on the lines of that already available, for a small number of specialist surgeons familiar with old fashioned techniques who would supervise the OK technical surgeons.

Without careful planning along these lines many expensive mistakes could be made.

Why me?

J Stuart Horner

To join that select group who have survived an observed cardiac arrest prompts many questions, not least, "Why me?" During my subsequent inpatient stay I saw two patients who failed to survive in apparently more favourable circumstances. I had been waiting to give a lecture at Kingston Postgraduate Medical Centre when a sudden nystagmatic movement of the house roofs opposite gave a brief premonitory warning before I subsided gently into the arms of my colleagues. I was placed in the semiprone position. In all cases of collapse cardiac arrest must first be excluded and this dictum was quickly followed. Resuscitation was started and the crash team called. Thirty minutes later I was admitted to the intensive care unit allegedly conscious, but my first recollection is of an insistent voice demanding to know if I knew where I was. Wherever I was, I was as reluctant to respond to the voice as someone in a comfortable warm bed is reluctant to respond to an insistent alarm clock. Once awake I was immediately able to give complicated instructions about my next of kin. Clearly no brain damage had resulted.

I was not short of explanations for the incident yet they seemed not to tally with my own experience. "You were anxious about the lecture." My telephone call to the centre to reassure that, despite my late arrival, the lecture would start on time was reinterpreted to imply that I was unnecessarily rushed. The determination of all the medical staff to ensure that I received the best possible care and the caring concern of the nursing staff simply confirmed my conviction that the NHS is the best place to be in a crisis. Arrangements were made for my transfer to St George's Hospital and this happened only five days later. Because of the ambulance dispute I was asked to make my own arrangements, which was perhaps unwise and undoubtedly hazardous. The ambulance workers would have agreed to my transfer if management could have been persuaded to make a suitably equipped vehicle available. Once I was settled in my Nightingale ward ambulatory cardiac monitoring was quickly resumed.

After the cardiac catheterisation the medical answer to my question was quickly forthcoming. Extensive coronary artery disease unsuitable for angioplasty meant that only a coronary bypass operation would relieve the electrically unstable heart. Yet this diagnosis itself was hard for an epidemiologist to bear. I have none of the conventional risk factors, being known locally as a "non-smoking, teetotal, fitness fanatic." Despite regular reminders from both the health authorities for which I have worked that the alleviation of stress should figure prominently in the health programmes I have advocated, I remain unconvinced that it is even an important factor. The term seems to mean different things to different people. If it means leading a busy life with many and varied engagements during a long working day I plead guilty. If, as I have always understood, it means the conflict of being trapped within circumstances over which you have little or no control it has no relevance to my own lifestyle. Decision making has never presented any problems for me and while others comment on the responsibilities I carry they do not intrude on those aspects of my life from which they should be properly excluded.

Enjoyable camaraderie

The camaraderie of a male surgical ward is an experience I will treasure. My medical background was quickly discovered—why else should I be about to speak to a group of doctors unless one of their number or a salesman? Fellow patients tried, unsuccessfully, to persuade one patient to accept the operation for which he had been admitted but now feared more than the risk of dying. Patients not making a determined attempt to recover were demoted to secondary status while each encouraged the other to yet greater efforts in the recovery process.

When my own day of operation dawned it began at a leisurely pace only to be transformed into frantic activity as my consultant insisted that I should be returned to my original place on the operating list. To submit myself into the total care of others was a novel but not unpleasant experience. I tried to do as I was told and to cooperate fully. My reward was freedom from pain and rapid mobilisation. Recovery after the operation was hampered by atrial flutter which left me breathless and exhausted on my bed. I felt I had let my fellow patients down but I need not have worried. In

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