BURNS AND MINOR INJURIES

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If my calculation is right, from the figures we have already heard, there are something in excess of 20,000 general practitioners in this country, and they seem to treat between 100 and 300 accidents in continuity each year. This is an accident load that is not heard of enough in national statitics, and we will learn something of that problem from Dr Fergusson. The next paper after that is on anaesthesia and analgesia. We in the Accident Hospital of Birmingham take our very skilled anaesthetists so much as an essential part of our organization that I do not think this symposium has yet paid sufficient attention to the great help modern anaesthesia has given to those of us who deal with severe injury. It is, I think, to be placed alongside new knowledge in blood transfusion and the care of the respiratory system as one of the really great advances in the surgery of all types of injury. Sometimes we stress the multiple severe injuries too much, but nobody should die of a minor injury under an anaesthetic these days, with the skills that modern anaesthesia can make available to all injured people. We shall then have a discussion by Mr Lowden, who has done so much in his writing and in other ways to improve the casualty services of this country, and Dr A. A. White, an industrial medical officer, a service which has developed almost completely during the last twenty years, and a service that is of extreme importance in any symposium on accident services.

THE MANAGEMENT OF ACCIDENTS BY GENERAL PRACTITIONERS

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When you invited me to speak about the management of accidents by general practitioners I felt that I would indeed be carrying coal to Newcastle or rather to Birmingham were I to attempt to tell you people how to manage accidents, particularly when the two main accident problems, those of first aid and the management of burns, have been, or are being, dealt with by others. None the less, simply because Birmingham enjoys a unique position, I thought that you might like to hear how others less fortunately placed than yourselves try to cope with these problems. Naturally, I cannot cover all types of accidents with which a general practitioner may have to deal, but I shall select a few accidents peculiar to my type of practice and use them to illustrate our problems in very general terms.

I do not intend to give you a discourse on geography but simply wish you to get certain facts into perspective. From Lochinver my practice stretches inland a distance of approximately 26 miles, rather further than the distance from Birmingham to Warwick. My nearest neighbour is at Scourie, 31 miles away across the ferry, my next nearest neighbour is at Lairg 47 miles away, where all the ambulances for the West coast of the County of Sutherland are based. From Lairg it is a good 50 mile run, and an hour and a half travelling time to all the west coast villages. Our nearest hospital is at Golspie 60 miles away from Lochinver, a good two hours' travelling time. This is a small hospital and therefore some of our major accidents must travel to Inverness which is 100 miles away and three hours' travelling time. In order that these distances may have some meaning for you people here, I should point out that your casualties, were they to travel comparable distances, would need to go from Birmingham to Oxford or to London. You will readily appreciate, therefore, that when you add to the problem of distance the fact that in winter we are often cut off for days at a time with snow and high winds, the general practitioner is perforce thrust back very much on his own resources when accidents occur. I trust, however, that none of you are thinking romantically of the Highlands in terms of major surgery

to be performed on the kitchen table, possibly with a wee laddie to hold a hurricane lamp for you. Those days, thank goodness, are past, if indeed they ever really existed. None the less, in spite of all the care that we can take, the occasional dramatic incident can still intrude and it serves to keep us very much on our toes.

At the surgery, apart from the usual equipment one would expect to find in any doctor's surgery, we keep both a plain canvas and a Neil Robertson stretcher, two sets of adjustable Thomas' splints, a special light transformer box and lamps, a specially designed light surgical kit as well as an oxygen set, plasma, dextran, and drip sets; these are accessible to the police and to the garage staff in an emergency, as well as to both the district nurses. You will note that I have used the word " we " since both I and the district nurses work as a very closely knit team and at times we include both the police and the garage staff. It may interest you to know also that one of these nurses is capable of giving a very effective general anaesthetic, under supervision, a fact which has been extremely useful on more than one occasion. Fortunately, or unfortunately, we have no heavy industry, and therefore we do not see the sort of accidents with which you will be all too familiar at the Accident Hospital. We do see the usual minor cuts, scratches, and burns, and for the former we do not routinely give antitetanus serum, but reserve this for cases where there is a special risk. I have never seen a case of tetanus, but I have seen several severe antitetanus serum reactions. Wherever possible we like to get these cases into the surgery where they can be assessed and dealt with thoroughly, particularly in the case of burns, where we simply cover the lesion quickly to exclude air and possible infection until such time as we can clean it up properly. Long experience has driven home to us the utter futility of trying to deal with these conditions in the patient's own home, especially where a general anaesthetic may be necessary. In this connection, may I put in a plea for the better training of the undergraduate in simple general anaesthesia. The present generation of housemen seem to be incapable of giving an anaesthetic without elaborate machinery and you cannot hump a Boyle's machine up a hillside. Your rescue team just will not stand for it—so I hope that Dr Bigley may be able to give us some help here later in the day. Personally, I cannot deprecate too strongly the tendency which has developed in recent years to use local anaesthesia almost exclusively in some casualty departments. Local anaesthesia to be effective must be skilfully given, and to inflict on an already injured and badly frightened child the further trauma of an inexpertly given local anaesthetic is to my mind nothing short of cruelty. I do not wish you to be misled here, I use local anaesthesia quite a lot myself, and it is ideal for many purposes, particularly where one

is single-handed like myself, but there are occasions when a general anaesthetic is essential, single-handed or not.

In the past, we used to deal with the simpler fractures and dislocations on the spot, because I have always felt that the longer these, particularly the latter, are left the less good the result is likely to be. Since the advent of the National Health Service, however, we have had to play safe like everyone else, and refer these cases for x-ray examination, even when we realize that the long and inconvenient journey is going to delay their treatment. This is a state of affairs which I regret as much as anyone, since it means that the patient in many cases is being less well or less quickly treated than he used to be, but it is something which we as doctors cannot help, and which the public must accept, so long as we are obliged to give them not the care which they require, but the care which they demand!

We have had our share of removing various foreign bodies from some rather unusual places, but one peculiar to our type of practice is the embedded fish hook. We get a number of these from the deep sea fishing fleet and of course from the fishing tenants in the summer. Usually they present little difficulty and are removed in one of two ways, depending upon their size and position, either by a cut down along the hook, or better still, because it causes less damage provided there are no vital structures in its path, by pushing the hook on until the point appears through the skin again, cutting off the barb and withdrawing the hook. We also get a variety of insect stings to which many of the visitors seem very sensitive, and some of them can become quite ill. For these we usually use an antihistamine and an antibiotic if necessary, but I must confess that I have not been impressed by the former, and so far I have not felt justified in trying cortisone. Once or twice I have needed to use adrenaline where severe bronchospasm has occurred, but fortunately have never been faced with shock sufficient to require pressor agents such as methedrine (methylamphetamine).

The summer provides us with the inevitable crop of road accidents, almost invariably involving visitors, almost always due to bad or to inconsiderate driving, and therefore quite unnecessary. We have over the years got our own patients trained to give detailed messages, since you will realize that simply to ring up and say, "Will the doctor come at once", as visitors are apt to do, is worse than useless. You will appreciate the importance of giving details, where time and distance play such an important part in the ultimate well-being of the victims. For instance, I want to know how many are involved and whether the pile-up is sufficient to justify calling out the ambulance, whether I should take one of the nurses with me and alert the other to have the surgery ready to receive casualties, or

whether to call out the police and one of the garage staff if people are likely to be trapped in or under vehicles. You must remember that the garage staff are not paid for the help they so willingly give, and it has at times been life-saving in itself. We have had to dismantle the boot of a car and take a trapped patient out through it, and I am not likely to forget the occasion when I had to lie under a vehicle which was slowly sinking into the peat in order to reach someone trapped underneath and wondering whether we were going to be drowned in the bog before my mechanical colleague could get his jacks into position. That he succeeded accounts for the fact that I am here today while the patient, I am glad to say, is back on the beat, and may at this moment be busy issuing parking tickets to some careless motorists in the City of London.

How we deal with the actual accident depends on its extent and position. If near enough, we usually take the casualties back to the surgery, rather than face the misery of waiting at the roadside, where we can deal with the minor injuries and carry on with resuscitating the more severely injured while waiting for ambulance transport to take them to hospital. There is one point here worth noting. I am aware that some casualty surgeons do not like emergency splintage since if ineptly done it may do more harm than good, but with our rough ground and long journeys, I am convinced that it is essential to support injured limbs. Note, I use the word " support " and not immobilize; I want to get away from the idea of tying limbs tightly. For this our Thomas' splint adjustable for both length and ring size is a godsend, and for those familiar with it, the old fashioned box splint still has its uses.

In my present practice, we do not get many mountain accidents, thank goodness, and I make no claim therefore either to be an expert climber or an expert in treating these accidents, while I have the sense to realize that I would only hold up a search party were I to attempt to keep up with it. The usual procedure is for me to stick with a small group which moves up behind the main search party. We do not dissipate our energies until the casualty has been found. This group carries the heavier gear with the Neil Robertson stretcher and the first-aid kits. I cannot take time to detail all that is in these kits but they are kept to the minimum as far as weight is concerned. They contain morphine and hyoscine and the wherewithal to give a general anaesthetic, though Dr Bigley will no doubt be most concerned when he hears that the anaesthetic is chloroform. Those mountain accidents which we have had have followed the all too familiar pattern. Usually the climbers are young, sometimes alone, often with little climbing experience. Sometimes they are ill equipped and badly shod, with no weather sense, and they

show a complete disregard for the need to stick to a recognized route. Rarely does the experienced climber come unstuck, and when he does we accept this as just a piece of bad luck. Though we never hesitate to turn out for fools and saints alike, it is a bit hard when shepherds, gamekeepers, and the like must turn out too, often at the end of a hard day's work, in bad weather conditions, at times in the dark, and occasionally at personal risk to look for some thoughtless individual. To me it also seems unjust that other people may have to wait for attention, sometimes for hours on end, while their doctor goes blundering off over the hills to attend to a climbing accident.

I hope you will forgive me for labouring these two types of accidents. Admittedly they are not minor, but both of them give cause for a great deal of anxiety on the part of those whose responsibility it is to deal with them, and they inevitably take up a good deal of time. If you should wish to help your patients and us to look after them while they are on holiday, you could not do better than give them the following advice:

When on holiday—please drive slowly. Highland roads are narrow and twisty, and a rushed holiday is not a restful one. If you want to look at the scenery, stop and look at the scenery. If you are involved in an accident, when you 'phone for help give all the details you can, and do not bite the head off the doctor or his wife when they ask questions. They both know more about road accidents than we hope you will ever have to learn, and they are only endeavouring to ensure that you receive the best possible care with the greatest possible speed. A few minutes at the beginning spent in planning may well save hours and perhaps lives in the end. If you must climb hills, pay attention to the weather; ask the advice of the hotel manager before you set off. These people, if not actually climbers themselves, are very familiar with their own hill country. Leave word where you are going, and when you expect to be back. Before you plan your holiday, contact one of the mountaineering clubs; they will be very willing to advise about clothing, shoes, etc. And, finally, do not attempt any rock climbs, no matter how tempting, unless you have been taught how to do this.

I realize that this talk must sound very dull to most of you, since it contains nothing spectacular, but as you all know the general practitioner's job is largely routine. However, occasionally the dramatic intrudes, and I shall relate one such incident. A child of three had been playing on the floor with a large collie. Whether he pulled the dog's tail or not, we shall never know, but the dog turned upon him and bit him in the face producing a punctured wound under the chin right up into the floor of the mouth, a puncture straight through the right side of the nose, an L-shaped gash under the left eye and a tear at the right-hand side of the mouth extending nearly halfway to the ear and bleeding as only face wounds can. I put him under quickly with a whiff of ethyl chloride, then got my nurse to keep him under with trilene, lifting the mask on and off to let me put in one stitch at a time, until we got his face

repaired. I am thankful to say the wounds healed well and show little scarring, though we hope when he is older that the plastic surgeon may be able to disguise those scars which he still has. Incidentally, this was the first time that this nurse had used trilene in earnest, and it says a great deal for her presence of mind that she was able to cope so well.

I have not told you very much about the management of accidents; I have instead stressed their avoidance, since I feel sure that you will all agree that it is on the prevention rather than on the treatment of accidents that we must concentrate.

ANAESTHESIA AND ANALGESIA

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Great advances have been made in anaesthesia, and this is very much seen in the work of accident hospitals today. It is greatly due to the foresight of your chairman that anaesthesia has been introduced as an integral part of the teamwork in treating casualties in this region.

This is not the time to go into details of anaesthetic techniques, as one would in teaching students. Many people here today know how to give anaesthetics and many are experts in their particular requirements for practice or hospital work. Dr Fergusson said that I might be dismayed to hear that chloroform was carried in his emergency bags, but the only thing which would dismay me would be having to use it, because I am no expert with chloroform, though many people are. As I shall mention later, it is not so much what you use in anaesthesia as how you use it.

In the accident hospital where I work the anaesthetist is a member of each of the teams into which the hospital staff is divided. The anaesthetist may well be amongst the first one or two people seeing a major injury, and he and the surgeons work absolutely together in deciding what is to happen to the patient in the way of surgery and resuscitation. To understand the position of anaesthetists inside hospitals and in general practice, it is important to realize how anaesthetics have developed over the past twenty years, not from the point of view of techniques, drugs, or apparatus, but from the point of view of what the student or the newly qualified practitioner today knows of anaesthetics and what he does not know. So frequently today either the newly qualified person does not know how to give an anaesthetic, or if he does he wants a Boyle's machine to be brought up the mountainside for him, as Dr Fergusson said.