(d) Prevention of onset of tolerance: Apart from the increase in severity of side-effects with a 'supra-optimal' dose of analgesics, it also hastens the development of tolerance which can be a major problem in the long-term treatment of intractable pain. Opinions vary as to whether drugs should be given 'as required' or on a fixed time basis. If the latter intervals are slightly shorter than the expected duration of the analgesic, the pain relief will be greater, for it is easier to prevent the return of pain than to relieve it when it has occurred. This, however, can lead to development of tolerance and should be reserved for terminal cases of malignancy. Rather than increase dosage of analgesics indiscriminately one should consider the use of some drug which will potentiate their action. The analgesic phenothiazines (chlorpromazine, promazine and propiomazine) are most useful in this respect, but neostigmine is most valuable on occasions. In cases of mild pain the sympathomimetic amines have some vogue, and nialamide may be used in post-herpetic neuralgia.

(e) Addiction, while not a problem in cases of malignancy, is likely to follow prolonged use of any of the potent analgesics. Dihydrocodeine, which is unfortunately of limited potency, is least troublesome in this respect. One must not resort too early to the drugs of addiction in non-malignant cases without fully exploring the possibilities of nerve-blocking, and the phenothiazines should be used as far as possible within their limits of safety.

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## The Treatment of Intractable Pain in Terminal Cancer

This contribution is based on experience in different capacities but mainly on work carried out at St Joseph's Hospice, where, for the past four years, I have been welcomed by the Irish Sisters of Charity and the doctors, to work with a group of their patients. Forty-five of their beds are reserved for patients with cancer who are admitted with a prognosis of three months or less. Only 10% live longer than this time. They are sent by other hospitals after all other active treatment is deemed to be over and, when, for various reasons, it is impossible for them to go home. They are sent because they are problems; for 70% the main problem is pain although this is rarely

the only symptom. Cancer at this stage is almost always a generalized disease and we are looking after intractable pain as a part of terminal illness.

Although the work has been carried out by a Department of Pharmacology, we have not found. that controlled clinical trials are suitable either in this setting or with this particular group of patients. At this stage they have many symptoms, they need a variety of drugs as well as analgesics: and their condition is deteriorating, often rapidly. They need a great flexibility of dosage and often have idiosyncrasies in regard to the drugs that suit them. One unsatisfactory or ineffective dose may lead, not only to one or two hours of pain, but to a loss of confidence which may last for days. Instead, I have been carrying on the daily care of these patients and have kept analysed detailed records of 900 who have died during this time. The aim has been to learn not only about the control of pain but also as much as possible about all the aspects of general management. It is not possible to treat pain in isolation for we have toconsider the whole person.

I am well aware that this is a specialized setting and how much of the atmosphere, which is a fundamental part of treatment, is created by the nuns and their nurses. This stands in the background of everything I say. Nevertheless, I have been able to compare problems and treatment in large groups of patients and also to know a smaller number very well indeed. I am able to go round alone and informally in an essentially unhurried setting. Just as one patient known very well may teach us more than many known only superficially, so our specialized experience may have something relevant to your discussion.

It is not my purpose to discuss drugs in detail; instead I have been asked to consider our methods of using drugs. What I want to say is so simple that I would be very diffident about it if I did not know that it worked and that the various students on the many teaching rounds that come to St Joseph's always remark that our patients are alert and cheerful, as well as free from pain.

We believe that there are a few cardinal rules in the treatment of intractable pain at this stage. First, we have to make as careful an assessment as possible of the symptoms that trouble the patient. This is not in order to make a diagnosis and give specific treatment, because that has already been done, but in order to treat pain and all the other things that can add up to a general state of misery as a disease in itself. This calls for symptomatic treatment, details of which I have no time to discuss but which may take up most of the space on our treatment cards. A great deal of pain can be relieved without the use of analgesics at all, or the need for them can be greatly reduced. If there are several methods of dealing with

nausea and vomiting, dyspnæa, a sore mouth and so on, there is always something helpful that can be done on a visit. If a doctor feels enthusiastic and confident about such simple things, the patient, who responds to thoughts more than words, will be helped greatly and of course the very listening itself can be therapeutic.

Secondly, comes the assessment of the pain itself, its severity and its nature. I do not find that patients overrate their pain, certainly not once confidence has been established, but I do think we often need skill in interpreting what they say, e.g. they may find it very difficult to distinguish between pain, paræsthesia or paralysis. Listening has to develop into real hearing.

Pain at this stage is almost always constant in character. Even if it has exacerbations, there is usually a steady background of pain as well. Constant pain calls for constant control and at this stage that means the regular giving of drugs.

I do not imagine that you find this a very startling statement, for certainly analgesics are often written up to be given four-hourly. All too often, however, the letters 'p.r.n.' are added in practice. At this stage, the patient should not have to ask for relief of his pain, nor should analgesics be withheld until it becomes severe. Instead, analgesics should be given as a routine. If the dose is assessed carefully, either the patient should not know pain at all, or it should only just be coming back to his consciousness when the next dose arrives routinely. Our patients do not talk of their indifference to pain but of the absence of pain. Analgesics should be given to prevent pain from occurring, not to control it when it is already present. The patient is thus much less dependent on the staff because he does not continually have to ask. He is also much less dependent on the drug and he may indeed forget that what he is having is actually for pain. This is important. This is a situation in which his independence needs maintaining in every possible way. Of course, a patient should not be kept waiting until the 'proper time'. It may be enough to have some mild analgesic in between and we often leave this beside the patient, especially at night when patients often sleep for seven to eight hours and miss the routine dose. If they constantly need something extra the regular dose should be increased but it is surprising how much help something to hand can be.

Pain itself is the strongest antagonist to successful analgesia and if it is ever allowed to become severe the patient will then increase it with his own tension and fear. We are convinced that it is this routine that enables us and other such homes to give the same dose of opiates, often for weeks and months on end. We may have to increase the dose with some patients quite rapidly at times but

this is not according to any constant pattern. I believe that it is far more often because of an increase in pain than because of the onset of tolerance. Patients may indeed be physically dependent on the drugs but tolerance and addiction are not problems to us, even with those who stay longest.

We define addiction as an emotional and demanding dependence upon a drug. It has been said that addiction is no problem at this stage of illness but such a state of mind is a problem to relations, to other patients and ward staff and. above all, to the patient himself, even if it only lasts a few days. If we let this happen, we take away the dignity which should be a characteristic of the dying and we leave hard memories for the relations. I remember one patient admitted in this condition who needed his drugs altered, not increased further, with immediate response; how his wife stayed outside the ward next day and said 'Doctor, I won't hurry in, I will just stay and look at him, I haven't seen him look like this for weeks' and how the son said to us 'Sister, you can keep him, he has nearly killed my mother'. This can be a very difficult problem indeed at home and there is a very great need for accommodation of this type.

We know that it is possible to handle the opiates over long periods so that such a situation does not arise. On the rare occasion when a patient is admitted in this state, and still more rarely when it begins to develop when the patient is still with us (1.5%) in all), we find that they respond to the addition of amiphenazole. Probably a drug in the phenothiazine group will be added also.

We also occasionally use amiphenazole when a patient is drowsy on the dose needed to control his pain. This is a very variable side-effect and some patients will need tranquillizers and sedatives added from the beginning. If it occurs it may wear off very quickly and lead to an unnecessary increase in the dose of analgesic if this is not understood.

I would like to add a note on the use of diamorphine. It was given to 42 of our first 500 patients, to women who were nauseated by other opiates and to a few patients who had intolerable feelings of suffocation. It was used so effectively that since then we have ceased using almost all other powerful analgesics in its favour. No other drug makes these patients look and feel so comfortable. In the doses we use, it does not cause changes in personality, frank euphoria or a 'could not care less' attitude, but it helps greatly towards our aim of keeping the patients feeling as well as possible for as long as possible. For the same reason, we use small doses of steroids and, of course, plenty of alcohol. Occasionally, such a

regime will produce startling improvements and a few patients are able to return for further palliative treatment or to go home for a while.

We have not found that diamorphine has a greater tendency to cause addiction than any other similar drug. We begin with very small doses. For example, 3–5 mg is often enough and our standard mixture contains only 5 or 10 mg. Only rarely do we use 30 mg but we are prepared to increase to 60 mg or even more on the occasions that this is necessary. Such increases do not add much to analgesia and may greatly increase side-effects and it is better to add sedatives or tranquillizers at this stage. By mouth we use the well-known mixture with cocaine and gin added (the Brompton mixture) sometimes adding the syrup of one of the phenothiazine group.

We find that we are able to reduce the dose if the patient's pain becomes less severe and we have several patients in the wards at the moment who have come off completely without any withdrawal symptoms. One drawback of diamorphine with very severe pain is that it may be rather short in action. We occasionally shorten the interval rather than increase the dose or may combine the drug by mouth and by injection, thus spanning our usual four-hourly routine.

The art of giving analgesics is to keep them continually at the patient's own optimum dose. We have to handle a drug in which we have confidence, whose effects and side-effects we know, so that we can fit the dose to the patient, use it regularly to keep pain constantly in remission, and add a variety of adjuvants that we know equally well. All the synthetic analgesics suit some patients some of the time, but all the homes for terminal patients go back to the opiates. We ourselves have found that diamorphine does the greatest good to the greatest number. Its dangers can be avoided by careful handling and nothing that is at present available deserves to replace it.

Mental distress may be perhaps the most intractable pain of all. This is a part of any deteriorating illness whether the patient has insight or not. He may be attacked by a weariness that can be harder to bear than pain, or by feelings of depression and of guilt at his own dependence. It is very hard for anyone to accept the fact that it is his own body that is letting him down. A patient may therefore tend to associate his troubles with his treatment and it is not surprising that such illness may cause resentment and aggression. Certainly mental pain is an important part of the situation and needs treatment. One of the nuns said rightly, 'Feelings are facts in this house'.

This pain calls for a skilled and confident handling of drugs. It is often more difficult to fit the right tranquillizer to the patient than to assess the need for analgesics. We cannot take away the hard thing that is happening but we can help to bring the burden into manageable proportions. We continually see this pain also relieved.

Once again, the greatest need is for a listener. I once asked a patient who knew that he was dying what he wanted to see in the people who were looking after him. His answer, 'for someone to look as if they are trying to understand me', sums up all the clinical assessment and the handling of treatment but also calls for an attempt to see what the mental and emotional aspect means to the particular person. It is indeed hard to understand another person but I always remember that he said 'trying'. He did not ask for success but only that someone should care to make the effort.

It is apt to be taken for granted that patients know that they are dying once they are sent to St Joseph's Hospice. This is not so, although they may come to know while they are with us. We leave this process to their own initiative and understanding. There can be no general rules about individuals, neither about patients nor about doctors. I know that between 30 and 40% of our patients have insight by the time they die and want to talk about it, either directly or indirectly. The great majority of this percentage tells us and it is not the other way round. They may want to discuss their underlying fears -'Shall I have pain; will it be very long; will it be in my sleep?' - or to talk about their families. For the rest, they may not be capable of understanding, they may never realize what is happening, or they may not wish to discuss it. It is left to them. I rarely get a completely direct question and practically never do they discuss their diagnosis, but it is important that as we listen to what they say we should hear their underlying questions. Each one is different and we do not find that they are ever afraid when they are allowed to come in their own right way and time. When there is always something helpful to do, there is also something hopeful to say. We have to wait upon them. Truth at this stage is in a relationship rather than in words and the discussion is often very indirect. This is a continually changing situation for each patient and we have to watch and try to time our help to the different stages of illness, to their awareness of what is happening and to the acceptance that I know is almost invariably given by the end.

The important thing at St Joseph's Hospice and the real witness to our treatment is the look on the patients' faces, their alertness, their independence and the achievement they are making of their illness. For they do make great achievements and leave good memories for their relations. All our work in dealing with intractable pain at this stage is just to try to make this possible.