Rational Therapy

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Cancer pain can be relieved

In Pakistan, 70% of cancer patients with daily pain were found to be suffering severe pain. Cancer pain could be largely prevented by such inexpensive drugs as acetylsalicylic acid, codeine, and oral morphine.

The World Health Organization has reported (1) that nearly six million new cancer patients are diagnosed in the world each year, three million in developing countries. Populations in developing countries are often rural, and patients may not be diagnosed until cancer is advanced and no longer curable. Unfortunately, 70% of patients with advanced cancer may have pain as a major symptom.

In the same report WHO recommended that cancer pain be treated using a three-step “analgesic ladder” based on severity of pain.

Step 1: non-opioid, with or without adjuvants.

Step 2: weak opioid + non-opioid, with or without adjuvants.

Step 3: strong opioid, with or without non-opioid and adjuvants.

In Step 1 acetylsalicylic acid, paracetamol, or a non-steroidal anti-inflammatory drug is given. If pain persists or worsens, a weak opioid, usually codeine, is added (Step 2). If pain persists or worsens, the weak opioid is replaced by a strong opioid (Step 3), usually oral morphine, and the non-opioid may or may not be continued. In selected cases, adjuvant anticonvulsants, psychotropics, or corticosteroids may enhance pain control or help associated symptoms.

All analgesic doses are individualized and are usually given orally on a regular schedule before recurrence of pain. Correctly used, analgesics can control cancer pain in more than 90% of cases and addiction is not a problem. Nevertheless, concern about drug abuse affects the availability of narcotics for the treatment of cancer pain in countries throughout the world. The following pain study was carried out in the Northwest Frontier Province of Pakistan, a country in which codeine is banned and other narcotics are available only in hospitals with special permission.
Pain evaluation

Sixty cancer patients with daily pain (33 males and 27 females) were interviewed in the city of Peshawar in April and May 1988. Fifty-eight of the patients had solid tumours, and the remaining two had leukaemia. Ages ranged from 16 to 70. Some were in-patients, while others were seen in an out-patient clinic and a radiotherapy department. Criteria for inclusion in the study were a diagnosis of cancer and the existence of daily pain judged to be due to cancer, not to surgery.

Patients were Pakistanis or Afghan refugees. Nearly all interviews were carried out by the primary author with the help of the third author, a medical student who spoke English and the local languages of Pashtu, Urdu, and Farsi.

Initially an attempt was made to use the comprehensive questionnaire known as the brief pain inventory or BPI, developed by the WHO Collaborating Centre for Symptom Evaluation at the University of Wisconsin (2). Designed to be self-administered, the questionnaire quantifies pain intensity and interference in daily life on a scale from 0 to 10. While complete, it is lengthy and perhaps too complicated for patients unfamiliar with detailed scales. Moreover, since only the English version of the BPI was available and many patients in the Northwest Frontier Province are illiterate in any language, all questions were asked orally in English when appropriate or by the interpreter in the patient’s language. However, after one patient complained that the questions were “eating her brain”, and when it became clear that the attempts to investigate how pain interfered with daily life were proving confusing, the questions were limited to the following.

1. Do you have pain every day? Where? (Body chart marked.)
2. Have you had surgery in the past month? (If answered yes, but surgery was not thought to be the main cause of pain, the questions were continued.)
3. Rate the pain at its worst in the past week on a scale of 0 to 10, with 0 being no pain and 10 being the worst pain you can imagine.
4. Rate the pain at its least in the past week on the same scale.
5. On average, how bad is the pain on this scale?
6. At the present moment, how bad is the pain on this scale?
7. Are you taking pain medication? How much? How often? Percentage of relief and duration of relief? (The concept of percentage may have been difficult for some patients to grasp. If there was no pain medication, the patient was sometimes asked why not. The patient was also asked if medication was needed.)
8. On a scale of 0 to 10, how much does the pain interfere with (a) general activity, and (b) sleep? (Probably best interpreted as mild, moderate or severe interference.)
9. Do you take medication for sleep, or nerves, or depression?
10. Do you need stronger pain medication?
Questions were not necessarily asked in the above order and were rephrased if the answers seemed inconsistent. Difficulties sometimes required the questions to be changed to: “Is your pain mild, moderate, or severe?” or “Is it as bad as you can imagine?”, thereby possibly influencing responses. Imprecise answers had to be approximated.

**Subjective estimates**

The subjective estimates of pain intensity made by the 60 patients were averaged to obtain the following results.

- pain at its worst in past week 8.0
- pain at its least in past week 3.0
- pain on the average 6.2
- pain at time of interview 4.7
- pain interference with:
  - (a) general activity 4.2
  - (b) sleep 4.6
  - (interpreted as moderate interference.)

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<tr>
<th>No. of patients</th>
<th>Worst pain (scale of 0–10)</th>
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<tr>
<td>37 (62%)</td>
<td>10</td>
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<tr>
<td>5 (8%)</td>
<td>7.5–9.5</td>
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<tr>
<td>7 (12%)</td>
<td>5</td>
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<tr>
<td>11 (18%)</td>
<td>2.5–4.5</td>
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**Pain relief**

Medication given for pain included paracetamol, nonsteroidal anti-inflammatory agents, including pyrazolone derivatives (which theoretically may have significant side-effects), pentazocine, and combinations of these. Codeine and stronger narcotics were unavailable, and buprenorphine, although available, was not used. Paracetamol was prescribed most often, usually given twice or three times a day. This regimen was partly satisfactory for some but wholly inadequate for others. Acetylsalicylic acid was not prescribed at all, although various more expensive nonsteroidal anti-inflammatory agents were given with partial success in some patients. In a few patients, pentazocine was given in oral combination medication or as an injection.

Twenty-four of the 60 patients reported taking no pain medication, although on further questioning three may have had anti-inflammatory agents for fever and a fourth was taking paracetamol for “congestion”, apparently without pain relief. Twenty-three of these 24 patients wanted pain medication, and one was unsure.

Such a large number of patients without pain medication had not been anticipated. When some were asked why this was so they gave various reasons. Four had not asked the doctor (one because of lack of money), two had trouble swallowing, one had a vomiting problem, two had new pain, and one had...
been told to avoid medicines. When all 60 patients in the study were asked if they needed pain medication or a stronger one, 48 said they did and five were uncertain. A further one wanted the same medication more often, another wanted something that would bring permanent relief, and another wanted medicine “for the disease itself”. Two patients suggested that it was up to the interviewers to decide what was necessary, and one patient’s doctor had told her that he knew more about her pain than she did. Only four patients gave an unqualified no.

In the group studied there seemed to be some lack of communication between patient and doctor, possibly due to a combination of individual stoicism and the cultural norm. Most patients reported taking medication according to their doctor’s instructions without questioning, altering dosage, or thinking to ask for more complete relief. It appears, therefore, that physicians treating this population may need to ask specifically about pain and the adequacy of medication if relief is to be achieved.

Medications available for pain relief were not prescribed as effectively as they might have been. Paracetamol, and to a lesser degree anti-inflammatory medications, were given at excessively long intervals, although they afforded some relief. Despite its efficacy and cheapness, acetylsalicylic acid was not used at all, perhaps, as one physician suggested, because patients perceive it as common and ineffective. Buprenorphine was never prescribed, and pentazocine was given to only a few patients. Although not ideal, these medications are the only ones available to treat moderate to severe pain in Pakistan. Unfortunately, opioids are not available at all except in hospitals with special permission, leaving patients with moderate to severe cancer pain little prospect of relief. When it is remembered that 70% of patients reported severe pain at some time, the magnitude of suffering because of lack of codeine and oral morphine can be appreciated.

Currently the best medicinal approach to treating cancer pain in Pakistan would be to follow the WHO recommendations for Step 1 and use full doses of an available non-opioid, e.g., acetylsalicylic acid (perhaps under another name to make it more acceptable) at four-hour intervals. Nonsteroidal anti-inflammatory agents are expensive and may be no better than acetylsalicylic acid in many cases. If pain is unrelieved despite full dosage of a non-opioid, the physician should add sublingual buprenorphine or oral pentazocine despite the expense.

There is no substitute, however, for the opioids—codeine and oral morphine. These medications are effective and inexpensive and do not cause addiction when used for cancer pain. With proper use of acetylsalicylic acid, codeine, and oral morphine, the vast majority of cancer patients can be made comfortable without costly and painful injections. It is imperative, therefore, that codeine and oral morphine be made available to relieve cancer pain in Pakistan.

References


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