The treatment of intractable pain in hospitals (pain clinics), in private practice*

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Introduction

PAIN is one of the most common symptoms which warns the body that something is amiss. It is one of the first sensations the human body learns to recognise – it is a basic human feeling. The paradox of pain is that everyone knows what pain is but it defies definition. Definitions are usually vague and variable because pain is mainly a subjective feeling.

Sherrington (1906) attempted a definition: "Pain is a psychical adjunct to an imperative protective reflex." Dorland's Illustrated Medical Dictionary defines pain as "a more or less localized sensation of discomfort, distress or agony resulting from the stimulation of specialized nerve-endings". Beecher (1956) referred to the "perception" and "processing" components of pain experience which relate to the neural and psychic elements of pain: the "perception" component results in awareness of pain while the "processing" element evaluates its significance to the individual. Chapman (1975) describes pain as "a gestalt or pattern of experience in which sensory information is judged both qualitatively and quantitatively by the perceiver with regard to the environment in which it occurs, its purpose, its novelty and its physical consequences. The classic descriptive definition of pain was given by a Medical student, on being asked to describe pain – "Pain is painful!"

Intractable pain is an entity by itself because of its causes, nature and management. Intractable pain can be defined as pain which is unmanageable or uncontrollable using the usual analgesics in their usual dosages or despite previous surgical intervention for the causative pathology; the pain experienced is longstanding and the disease process chronic, incurable or inoperable.

The common causes of intractable pain can be listed (Swerdlow M., 1967) as shown in Table 1.

Table 1: Common causes of Intractable Pain

1. Cancer giving rise to intractable pain
2. Post herpetic neuralgias
3. Post traumatic neuralgias (including painful post surgical scars, phanthom limb, painful post amputation stumps).
4. Trigeminal neuralgia
5. Intermittent claudication.
6. Osteoarthritis (nerve root trapped by arthritic process)
7. Causalgia
8. Coccidynia
9. Paget's Disease
10. Angina
11. Undiagnosed intractable pain.

The management of patients with intractable pain can be considered under two situations.

I. Management in a hospital with facilities – Pain Clinics.

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II. Management without hospital facilities e.g. in private practice.

I. Management of a Patient with Intractable Pain in a Hospital

Pain Clinics

A Pain Clinic is an organised unit, usually within a hospital, to which patients with intractable pain are referred for symptomatic relief. It is not a diagnostic clinic (patients should be diagnosed before referral); its aim is to relieve patients of their prolonged painful suffering plus maintaining their mental morale. Ideally a Pain Clinic should be run by a team of consultants such as a Radiotherapist, a Neurologist, a Psychiatrist and/or a Psychologist, a Neurosurgeon and an Anaesthesiologist. (Wylie, Churchill-Davidson, 1972). The Pain Clinic also provides ideal opportunities for conducting clinical trials on analgesic regimes and facilities to demonstrate and teach medical students and/or trainee-doctors various regional nerve block procedures.

The basic function of an anaesthesiologist is to protect patients from experiencing the pain and discomfort associated with the surgical knife. With such a background in training the anaesthesiologist is ideally suited to take charge of a Pain Clinic. The idea of Pain Clinics is a relatively recent one (within the last 15 – 20 years) and today, in properly-run, well-staffed hospitals a Pain Clinic is an accepted entity. Besides Intensive Care Therapy, Resuscitation, Obstetric analgesic services, Pain Clinics have expanded the role of the ansesthesiologist taking him or her more and more out of the confines of the walls of the operating theatre (where his or her function is to administer anaesthesia for surgery).

Hospital Management

I. *Detailed history of the Patient's complaint (intractable pain)*
- Site (any referred areas?)
- quality
  - stabbing?
  - burning?
  - pricking?
  - aching?
  - shooting?
- intensity
  - does it interfere with sleep?
  - does it interfere with daily chores?
  - does it interfere with occupation?
- duration and pattern.
  - is it constant?
  - is it periodic?
- any bladder dysfunction?
- any bowel (rectal) dysfunction?

2. *Clinical Examination*
- General examination
- Any sensory or motor deficits?
- Any muscle wasting?
- Any altered tendon reflexes?
- Any difficulty in walking due to pain?
- (must be distinguished from gait impairment due to motor weakness).
- Plot pain distribution on dermatome chart (serves as a guide to nerve roots which might require blockade).

3. *Explanation to patient of procedure planned and the possible consequences*
- obtain consent

Procedures available in management of patients with Intractable Pain (mainly incurable malignancy)

I. *Physically fit patients*
- i. Palliative surgery
- ii. Radiotherapy.
  If i and ii are not satisfactory,
- iii. Neurosurgical procedures.
  - a. Posterior rhizotomy
  - b. Sensory root section (e.g. for Trigeminal Neuralgia)
  - c. Antero-lateral cordotomy.
  - d. Bilateral Cordotomy (e.g. for widespread pelvic cancer – high incidence of bladder dysfunction might result).
  - e. Stereotaxis (e.g. for Thalamic Pain).
  - f. Pre-frontal leucotomy (e.g. for cases with much emotional reaction to pain).
  - g. Electro-convulsive therapy (E.C.T.) or antidepressive drug therapy (e.g. for patients with marked depression).

2. *Patients unfit for Anaesthesia and Surgery*
- i. Neurolytic block denervation.
- ii. Electrical percutaneous cordotomy.

3. *Patients Unfit for Nerve Blocks or any Surgery*
- analgesic drug therapy (the last resort).

Procedures commonly used in Pain Clinics are as shown in Table 2.

The commonly used neurolytic agents are as shown in Table 3, and when used the general aim is a therapeutic one.

When the general aim is a diagnostic one non-neurolytic agents are used (see Table 4).

Table 2: *Showing common procedures associated with Pain Clinics*

1. Local infiltration
2. Injection around somatic nerves
3. Injection around autonomic nerves and ganglia
4. Intrathecal injection
5. Epidural injection
6. Osmolytic neurolysis and hypothermic subarachnoid irrigation
7. Percutaneous electrical cordotomy
8. General analgesic drug and adjuvant therapy.

Table 3: Commonly used neurolytic agents

1. Absolute alcohol
2. 5% Phenol in glycerine
3. 1 in 50 chlorocresol in glycerine

Table 4: Non-neurolytic Agents for diagnostic purposes

1. 1% lignocaine
2. 1% Prilocaine
3. 0.25% Bupivacaine

II. Management without hospital facilities e.g. in Private Practice

The Private Practitioner tends to treat a patient as a whole and not the disease or complaints separate from the patient. This should be true of all doctors including those in institutional or hospital practice Unfortunately there is a tendency amongst some doctors in busy hospitals to treat the disease without paying enough attention to its effects on the patient as a whole.

Human pain is a complex symptom because it involves a sensory-discrimination dimension, a motivational-emotional dimension, a cognitive-evaluation dimension of experience. (Melzak and Casey, 1968): human pain has also a social dimension (Chapman, 1975).

The Private Practitioner has a definitite role to play in the management of intractable pain. The role can be divided into two aspects: first, as an individual and secondly, as part of a team.

Individual Role

Patients presenting with certain causes of chronic, intractable pain (e.g. postherpetic intercostal neuralgia, painful surgical scars) can be managed with simple nerve blocks (e.g. intercostal nerve blocks), analgesic drugs (e.g. pentazocine), anti-depressives (e.g. amitriptyline or imipramine), reassurance and moral support. Patients who visit a particular Practitioner for their problems have tremendous faith in their "family doctor". This confidence and reliance on the particular private practitioner can be utilized for the emotional and psychological aspect of the management of chronic pain.

Acupuncture has over recent years posed the controversial possibility of its use as a means of providing anaesthesia for surgery. However, as an art, it has been used for thousands of years in traditional Chinese Medicine for the treatment of a wide spectrum of complaints and ailments.

Acupuncture, as an addition to the armamentarium of the anaesthesiologist for operative anaesthesia requires more investigations and studies for universal acceptance. Opinions and views vary from the convinced to the unconvinced, the cynical, the skeptical. Day et al (1975) in a recent paper (albeit in only 4 subjects) failed to demonstrate the effectiveness of acupuncture as provider of anaesthesia. Their results confirm and extend those of Clark and Yang (1974) who found that "the sole effect of acupuncture was to cause the subjects to raise their pain criterion in response to the expectation that acupuncture works." Day et al (1975) conclude that from a clinical point of view the hypothesis that acupuncture would be as effective as conventional anaesthetics should be rejected since the latter work virtually all the time in virtually all patients; they grant that acupuncture works in some persons sometime. Studies on acupuncture have so far revealed no evidence of neurological basis for analgesia; psychophysical studies have revealed that acupuncture prophylactically reduces pain only a little or not at all, since its effects on sensory functioning are trivial considering the surgical assault patients experience. Most such studies however take the unrealistic view that human pain is simple and uncomplicated. It is now recognised that human pain is a far more complex modality.

The success of acupuncture for chronic painful conditions (e.g. vague backaches and neuralgia) seems to be more promising. Such patients have had their complaints for a long-time despite various medication; quite often the cause of their condition remains undiagnosed. Such patients if they have

faith in a Private Practitioner and are emotionally tuned to accept the efficacy of acupuncture might be the ideal candidates for successful acupuncture therapy. Suggestion and subjective acceptance might make acupuncture a valuable addition to the repertoire of the Private Practitioner in the management of patients with chronic painful conditions outside a hospital.

The Private Practitioner has a place in the team involved in management of intractable pain in Pain Clinics within hospitals; the role is one of continuing management. In consultation with the hospital staff the Private Practitioner continues the regime advised and helps the patient adjust himself or herself to the usual environment of home and perhaps occupation.

The patient with intractable pain, particularly the patient with incurable, terminal malignancy, is indeed a pathetic sight. He or she feels a sense of abandonement – relatives, doctors, nurses, however hard they try, will have, often unintentionally, indicated to the patient that the only hope left is death. No active treatment is done and eventually addiction to narcotic analgesics is the final form of "treatment" – one should bear in mind that narcotic analgesics to not remove pain; they make pain more bearable.

The Pain Clinic offers such patients some hope in that their intense suffering can be relieved. To many of them the feeling of belonging returns when some procedure (e.g. a neurolytic nerve block) to alleviate pain is undertaken. Though they realize that death is inevitable they are grateful for the pain-relief. Depression can be counteracted by the judicious use of anti-depressive drugs. Condemning a patient to drug addiction is a negative approach to the problem. The Pain Clinic can offer a relatively positive approach to one of the major depressive problems in medicine. Whether or not acupuncture can play a role in Pain Clinics poses an intriguing thought. Pain is always real; whether there is an organic or psychological basis, the patient requires treatment.

Summary

Definitions and general discussion of pain, intractable pain and pain clinics are outlined.

The management of patients with intractable pain is discussed from two approaches:

1. In hospital practice (Pain Clinics)
2. In private practice.

Acupuncture as a method of management is discussed.

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