

Pain: friend or foe

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Pain, the most urgent of symptoms usually signals the presence of potential or on-going injury to tissue which requires attention.

The warning that pain provides is, therefore, a good thing and in a way friendly. When pain continues or resumes after the healing process of injury is complete, it is no longer signalling on-going tissue damage but becomes a disease in its own right. That, in essence, is the presentation of most chronic pain syndromes referred to Pain Clinics for investigation and treatment.

The International Association for the Study of Pain (IASP), formed in 1971 defines pain as:¹

An unpleasant sensory or emotional experience associated with actual or potential tissue damage, or described in terms of such damage. Pain is always subjective. Each individual learns the application of the word through experiences related to injury in early life.

Pain being subjective, it cannot be measured by instrument unlike blood pressure or body temperature, to mention two commonly measured parameters. This lays enormous responsibility on the pain management physician who must accept the patient's assessment of his/her severity of suffering and select indirect methods to measure its degree in order to guide treatment and prognosis. Quantitative Sensory Testing (QST) for pain states is an attractive development which has yet to be applied to routine clinical practice.²

The sensory pathways, which transmit impulses perceived at the cortex as pain, are well described and need no revisiting.³ However, over the past three decades, progress made in unravelling the neural mechanisms involved in pain perception has resulted in pain being moved from the realm of the moral to that of the medical responsibility of all doctors. The change of attitude in individuals with pain, to no longer suffering in silence has resulted in increasing numbers of physicians taking responsibility for relief of their patients' pain by the establishment of Pain Clinics. Progress in understanding the neural mechanisms of pain includes:^{4,7}

- The description of nerve cells that confer pain sensitivity.
- Central nerve pathways that transmit the information to higher centres.
- Visualisation of metabolic changes in the brain produced by painful stimuli.
- Pathways that selectively amplify or suppress pain signals explaining the tremendous variability of pain severity reported by different patients with similar injury.
- It is now common knowledge that endogenous opioid substances (endorphins) in the brain can produce pain relief and bliss.^{8,9a,9b}

This body of information has helped remove pain from the realm of the purely personal, thus making it less of a burden that the patient has to bear with resignation.

It has been traditionally assumed that the relief of pain in patients was a simple task for which no special training was

required. Unlike the management of acute pain, that of chronic pain syndromes remains a major challenge for most doctors and often requires a team consisting of a variety of health care professionals; the so called multi-disciplinary approach. This concept was originated by Dr John J Bonica in the 1950s and implemented in 1961 at the University of Washington, USA.¹⁰ The approach adopts the biopsychosocial perspective emphasising the need to consider the whole patient and his/her environment, while recognising that chronic pain patients cover most medical specialties.

The role of the Pain Clinic is to decrease subjective pain experience, increase general level of activity, decrease drug consumption, return to employment or full quality of life and decrease further use of health care resources. Much of the aim of Pain Clinics is to do with reducing disability and maladaptive coping styles and breaking the cycle of perpetual specialist referral.

Referrals for Pain Clinic services are from general practitioners, orthopaedic surgeons, rheumatologists, neurologists, gynaecologists, general physicians, neurosurgeons, thoracic surgeons and maxillofacial surgeons, to name a few.

Over the six months the Pain Clinic Service has been available at Parirenyatwa Hospital, cases with the following diagnosis have been referred for management.

- Post herpetic neuralgia.
- Trigeminal neuralgia.
- Post amputation pain.
- Brachial plexus avulsion injury pain.
- Abdominal pain secondary to chronic pancreatitis.
- Post stroke pain.
- Scar pain.
- Facet joint - back pain.
- Abdominal pain with irritable bowel.
- Head and neck pain.

The mainstay of management has been medical, using well tested drugs as well as those based on newer concepts. Blocks to destroy nerves, though few in number, only followed convincing trials with local anaesthetic blocks.

Since conventional medical practice leaves a lot of pain unrelieved, that pain becomes chronic. Its management has become a new specialty calling for the establishment of Pain Investigation and Treatment Clinics, with physiotherapists, occupational therapists, nurse specialists and clinical

psychologists joining their physician colleague to form the multi-disciplinary pain management team.

References

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