

Pain as a Chronic Disease

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The statistics regarding the prevalence of pain in our country and its impact are staggering. More than 75 million Americans suffer from chronic, debilitating pain.¹ Over 50 million of these individuals are partially or totally disabled by pain.¹ Pain causes more than 50 million lost workdays at a cost of more than \$3 billion in lost wages and more than \$100 billion in lost productivity.² In contrast to acute pain secondary to tissue trauma, chronic pain is a self-perpetuating disease process that causes distinct morphologic and physiologic changes within the CNS.^{3,4}

History/Background

Pain and suffering have been experienced, observed and treated for centuries. Prior to the 19th century, pain was regarded as a symptom and treatment focused on palliation. It was often thought that the person experiencing pain was evil or in need of some sort of punishment.⁵ Pain was described as physical or mental with the implication that one was real and the other imagined, or sometimes in the realm of the spiritual. It wasn't until the late 19th century that major technological and scientific advances took place in medical care. Surgical and pharmacological interventions were developed and established a basis for palliative relief.⁶

Recent Developments

In the midst of the developments of the 50s and 60s, the prevailing focus of clinicians was on the treatment of the underlying disorder, of which the pain was a symptom. During the 80s and 90s, behavioral factors in the experience of pain were acknowledged and illustrated the necessity of viewing pain as a multifactorial bio-psycho-social problem. The current understanding is that chronic pain is a disease process in itself. Even though it may exist as a manifestation of another disorder, pain left untreated and ongoing will cause prolonged or permanent pathophysiologic peripheral and central nervous system changes that can result in chronic pain and suffering.⁷

Definition

The International Association for the Study of Pain defines pain as an "unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage."⁸ The definition of pain speaks to

its complex nature and acknowledges its effects on the entire person. Even with a working definition and significant advancements in our understanding of the pathophysiology and treatment of pain, it remains a difficult clinical challenge for the practicing physician. Unlike other disease processes, it is difficult to measure, validate and classify. Clinicians must rely on the subjective estimation of pain by the patient and often have no diagnostic test or structural findings to validate the patient's complaints of pain.

Categories

The classification of pain can be somewhat confusing, and there is no universally accepted system. Pain has been variously classified as acute or chronic, physiologic or unphysiologic, nociceptive or neuropathic, central or peripheral, or as belonging to Category I or Category II. The American Academy of Pain Medicine has attempted to resolve the confusion by adopting updated terminology to better describe pain on a functional basis, consonant with our current understanding, as suggested by Lippe in 1998.⁹ Category I pain is "eudynia," a term that represents pain as a symptom of an underlying disease process. It incorporates nociception, is considered physiologic and is managed in a relatively straightforward manner. Category II pain is termed "maldynia," pain that serves no useful purpose to the organism. Maldynia is a neurobiological disease that takes place at the molecular and cellular level. A subcategory of maldynia is neuropathic pain, pain due to disease or dysfunction of the nervous system. Examples of neuropathic pain are diabetic neuropathy, primary headaches, post-laminectomy syndrome, and post-herpetic neuralgia. This pain can be difficult to understand and treat. Some chronic maldynic pain syndromes are secondary to persistent untreated eudynia, such as chronic post-surgical pain.

Pain Medicine Specialty

As chronic pain is increasingly being considered a distinct disease process, so has pain management become a distinct medical specialty. In our society, Pain Medicine is a rapidly evolving specialty in response to the widespread problem of under treated pain. It is no wonder a specialty has arisen dedicated to the study, evaluation, treatment of pain and the rehabilitation from its maladaptive effects. From the mid-20th century to the present, significant developments have taken place. In 1965, Melzack and Wall published their *gate control theory* outlining and emphasizing the importance of ascending and descending modulating pathways in the CNS.¹⁰ John Bonica, a World War II Army anesthesiologist, proposed the

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concept of multidisciplinary, multimodal management for chronic pain and published his book, *The Management of Pain* in 1953.¹¹ Many other dedicated physicians, mostly from the specialties of anesthesiology, physical medicine, neurology, and neurosurgery, helped evolve the current specialty of Pain Medicine.

Pain Medicine Specialists

Complex pain problems require a coordinated effort on the part of all treating physicians. Primary care physicians (PCPs) will usually see most pain problems initially. With an understanding of pain as a disease process and basic knowledge of the concepts of pain physiology and classification, PCPs will be able to coordinate the care of their patients in pain. Pain Medicine specialists are available to provide care at various levels. They can be utilized as consultants, prescribe or advise medications, provide indicated specific pain relieving procedures, prescribe rehabilitative treatment, refer for psychosocial counseling, or be asked to comprehensively manage pain and symptoms. There is some variation in the services individual Pain Medicine specialists provide, depending upon training, primary specialty, and personal expertise. It is wise to familiarize oneself with the Pain Medicine physicians in your area and the services they provide.

Conclusion

Unfortunately, many physicians still maintain biases about patients in chronic pain and the resultant treatment. Competent and caring physicians will keep in mind that chronic pain, whether malignant or non-malignant, remains grossly under treated, and patients suffering from pain disorders often experience significant delays in treatment. Biases and delays often result in unnecessary and prolonged pain and suffering. Persistent, untreated pain can condemn someone to a lifetime of chronic pain that may be avoided with early intervention. As

with other evolving specialties, the astute physician should remain objective, believe his or her patients, establish working relationships with area specialists, and consult early if there is any doubt about a patient's pain. **NFM**

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Errata

In the Spring 2005 issue of *Northeast Florida Medicine*, **Dr. Selina Lin's** name was misspelled in the Table of Contents.

In the 2005 Duval County Medical Society Membership Directory, **Dr. Tracy Sinha-Khona's** speciality designation was incorrectly listed. **It should read AI-OS.**

We regret these errors and always strive to provide accurate information in our publications and on our website. When an error occurs, we seek to rectify it by publishing errata as we have done here.