CAN PAIN KILL?



The title of this article is certainly provocative. Many different answers could be forthcoming based on the experiences and inclinations of the practitioner to whom this question is put. For example, if one were to ask a general surgeon, I am sure the response would be that pain is extremely useful and is ultimately good for the patient. If appendicitis was not painful, patients would not go to the doctor and they would die of peritonitis from a burst appendix. This diagnosis would almost certainly be made at autopsy-a scenario of little comfort to the patient or family. The pain from an acute attack of appendicitis, therefore, alerts the patient that something is very wrong and that action needs to be taken. If one were to ask the trainer or physician for a professional sports team the question, "Can pain kill?" one might get a perplexed look and possibly a shoulder shrug since such individuals also find pain to be a very useful symptom in the assessment of athletes who are their responsibility. Certainly no team manager or coach wants his roster to be decimated by injuries that are discovered far too late in their course. Here again, acute pain is very useful. It is a warning that must be heeded so that the problem can be effectively dealt with before it gets to the point where it

becomes debilitating. The above two scenarios obviously refer to acute pain. In these situations pain provides a necessary protective function. One could even argue that acute pain helps to prolong life since the individual is alerted to a problem and hopefully gets the problem taken care of before it becomes extremely serious.

I would wager that the vast majority of health care practitioners who are reading this article would tend to view pain as extremely undesirable. When pain is no longer of value in warning the patient that there is a problem, it can become THE PROBLEM. Under such circumstances many would argue that chronic pain, that is pain that lasts several months without substantial resolution, can by itself shorten a person's life. Having been in practice almost 20 years, I can attest to a large number of patients whose quality of life is moribund or severely limited because of chronic pain. Many such individuals can no longer work and can no longer engage in recreational activities. Interactions with friends and family that had previously given them much pleasure and had enhanced the quality of their lives are but memories of a past existence. Thus, in a very real sense, chronic pain can negatively impact the quality of a person's life. Some patients

have become so distraught that they have committed suicide rather than face a lifetime of severe, unremitting chronic pain. Fortunately, however, such drastic actions are rare, but they occur nonetheless. Aside from suicide, can pain really kill? And, if so, how?

Chronic pain is stressful and breeds other stressors. Payment for medical services, including prescription medications, may be a hardship for some patients. Because the patient can no longer work as efficiently, or even work at all, creates financial pressures which can only exacerbate an already bad situation. Furthermore, the loss of self esteem, especially in a patient with a strong work ethic, can lead to problems with identity and even depression. Sometimes the very thought of performing an activity such as washing dishes, riding in a car or doing the laundry can be anxiety provoking. Dread and eventually social isolation can ensue. One example in my own practice comes to mind. A patient of mine who suffers from a chronic, painful condition had been invited to a wedding which was to be held out of town. She did not want to miss the wedding since the bride was the daughter of a very trusted and valued friend. However, attending the wedding meant that the patient would have had to perform

activities that she knew would be painful. Such activities included sitting in the car for the lengthy trip to and from the wedding, and sleeping overnight in a motel and strange bed. Clearly, no matter what this patient did, she would suffer-increased physical pain if she went or a missed opportunity for being with friends if she stayed. The patient decided to attend the wedding but "paid for it" by having a flare-up of her painful condition that took weeks to subside. Often our patients find themselves in such a "no-win" situation very stressful, indeed!

There have been numerous studies on the effects of stress on the immune response which deserve comment. Taken as a whole, these studies have shown several interesting phenomena. One Intriguing discovery is that immune cells, particularly lymphocytes from individuals under stress, do not behave as well in response to mitogenic stimuli in vitro compared to those from controls. These observations are very thought provoking since a vigorous immune system is necessary for survival. It is what prevents our bodies from succumbing to infections and also is responsible for the removal of unwanted metaplastic cells which, if not recognized by and disposed of by natural killer cells, could proliferate and eventually form tumors. Clearly this immune surveillance is a very important body defense mechanism.

Bad things can happen when the immune system malfunctions. If the immune system is weakened, infections can become more common, possibly with lethal consequences. Furthermore, if the body loses the ability to distinguish "self" from "non-self" it might mistakenly make an immune response (i.e. an attack) on normal tissue. Thus, autoimmune diseases such as systemic lupus erythematosus or rheumatoid arthritis could develop. As note above, if the immune surveillance breaks down because lymphocytes cannot be stimulated appropriately, an individual

could develop malignancies. There is no doubt from reviewing the scientific data that lymphocytes simply do not behave normally if they are obtained from individuals under significant stress.

But what does that have to do with actual disease states? A review of the medical literature suggests that the course of infectious disease can take untoward turns in patients under stress. For example, the noted physician, Thomas Holmes, who performed research on patients with tuberculosis from 1949 to 1961, concluded that patients with significant stress in their lives tended to do worse (Lerner, 1996). Their disease was more severe, it involved more organs, it lasted much longer despite treatment and eventually negatively influenced longevity. Stress, therefore, in such a scenario can weaken patients and possibly even hasten their deaths.

If one examines the stress of the loss of a loved one, particularly the loss of a spouse of many years, a similar conclusion emerges. Bereavement is a significant stress and oftentimes individuals so affected die relatively soon after their spouse. This observation was succinctly put by Sir Henry Wooten: "He first deceased/She tried to live without him/She liked it not/and Died."

Thus, a compelling argument can be made that chronic pain kills, and that it does so as a significant stress by itself and as a cause of other significant stressors. Then what can be done? First, it is important to understand that individuals do not need to suffer from chronic pain given the array of medications and other treatments at our disposal. Good treatment is available. However, even if the chronic pain itself can be minimized and the quality of a patient's life be improved, significant stressors might still remain. Chief among them are the real threats of financial ruin and loss of independence. It is easy to understand how a patient who has lost a limb can be impaired and might even be considered disabled from

certain occupations. However, many patients suffering chronic pain look normal. In fact, this is a "pet peeve" of more than a few of my patients. They often resent statements to the effect that they look well or don't appear to be ill, when in fact, they are suffering greatly. Disability benefits should be available to patients who become disabled by their chronic, painful condition so that the financial stressors can be minimized. Obtaining Social Security Disability benefits, however, can be an uphill battle and yet another stressor for these patients. It is important to assist these patients so that these deserving patients get needed help. By conveying the true nature of our patients' impairments to the appropriate agencies and even their attorneys, the pain practitioner can be helpful in getting appropriate assistance and potentially stress reduction for these individuals.

Chronic pain can kill the quality of one's life, can kill one's spirit and can even decrease longevity. The mechanism for the latter phenomenon appears to be due to the negative impact of stress and stressors on the immune system. The mission of health care practitioners who treat patients who have chronic pain should be to try to minimize as many stressors as possible to assist their patients live out a normal life span, with each day being as productive and fulfilling as possible.

Reference

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