Summary

Pain management is a critical component of the treatment of advanced colorectal cancer. In this chapter, a set of core principles is outlined to assist in the diagnosis and treatment of most causes of pain in the colorectal cancer patient. An algorithmic approach is described to facilitate expeditious and efficacious treatment.

Key Words: Pain; nociceptive; neuropathic; narcotic.

1. INTRODUCTION

Although pain for patients with colorectal cancer (CRC) may be a “pain in the butt,” treating their pain need not be. In this section, a set of core principles will be outlined to assist in the diagnosis and treatment of most causes of pain in the patient with CRC. An algorithmic approach is described to facilitate expeditious and efficacious treatment.

2. TYPES OF PAIN

Pain is often defined as: “An unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage” (1). Thus, pain is not pleasant, can be strictly an emotional experience, and is associated with tissue damage. Although this helps in defining what is and is not pain, it does little to help define pain in a manner that aids treatment. Broadly speaking, pain that meets the above definition may be one of three types: nociceptive, neuropathic (or non-nociceptive), or psychogenic (Fig. 1) (2–4).
2.1. Nociceptive Pain

Nociceptive pain is caused by the stimulation of “nociceptors,” or pain receptors at nerve endings. It is a “normal” pain that all have experienced and is easily described to others. This type of pain is most easily referrable to a recognizable injury or mass. It may be divided into somatic nociceptive pain, which is a well-localized, constant pain usually involving the body wall. A typical example is the pain associated with bone metastases (5). In contrast is visceral nociceptive pain, as might occur with pancreatic cancer. This pain involves a visceral organ, is typically paroxysmal, and poorly localized. Regardless of the type of nociceptive pain, all involve nociceptors and are responsive to nociceptive blockers such as opioid agents (6).

2.2. Neuropathic (Non-Nociceptive) Pain

Pain of this type is very difficult to describe to others as it is characterized by sensations not typical of pain. Many will complain of pins and needle sensation, a burning feeling, or shooting pain (7). A classic example of this type of pain is peripheral neuropathy resulting from chemotherapy. Neuropathic pain is characterized by dysfunction somewhere in the nervous system (8). This dysfunction may be either in the peripheral or central nervous system (CNS; as may occur from a spinal cord lesion) (9). It need not be associated with a discrete lesion and may persist even after apparent healing. It best thought of as a “short-circuit” in the nervous system that processes pain signals. Opioids are not the treatment of choice. Agents such as antidepressants and anticonvulsants, which aim to minimize the short circuiting, are typical first-line choices (10).