The fear of cancer is largely the fear of pain. The reason is clear: Most cancer patients will experience pain either as a result of the disease process itself or as a result of the diagnostic and treatment procedures to which they are subjected. Given that approximately 30% of Americans will develop cancer [1], it is therefore not surprising that cancer pain has been described as one of the most pressing problems facing society today [2].

Most pain associated with cancer is the result of one or more of three processes. First, pain may develop from the disease process itself, as in tumor infiltration of the skeletal system, compression of nerves, or inflammation due to tumor growth. Second, pain may result from diagnostic procedures, such as bone marrow aspirations, or from treatment procedures, such as surgery, radiation, or chemotherapy. Finally, pain is affected by one's psychological state: Anxiety, depression, and other negative effects frequently accompany cancer and are known to be associated with an increased perception of pain [3–5].

Cancer pain is treated in a variety of ways, ranging from narcotic medications to special surgical procedures. Because these procedures often do not totally control pain and may have unpleasant side effects [6], psychological approaches to cancer pain management have been explored. The purpose of this chapter is to describe briefly several types of psychological interventions that are used to treat cancer pain. Because of space limitations, we have not attempted to provide either an exhaustive review of the clinical literature or a methodolo-
Psychologically critical analysis of the research literature. Rather, the chapter provides a general summary of the most commonly used psychological interventions for both children and adults, the common mechanisms that may account for their effectiveness, and recommendations for their clinical implementation.

Two points should be emphasized about using psychological approaches to treat cancer pain. First, all cancer patients should receive educational and supportive interventions as a part of their pain treatment. In a general sense, these interventions might be subsumed under "psychological" techniques; however, they are not reviewed in this chapter. Second, effective cancer pain management is best achieved through a multidisciplinary approach that incorporates several different types of treatment approaches. From a clinical perspective, it is the combined impact across modalities, not the main effect of any one modality, that is of greatest importance. Thus, although this chapter focuses solely on psychological procedures, ultimately it is their adjunctive use with other pain control techniques, not their isolated impact, that is most important.

PSYCHOLOGICAL INTERVENTIONS FOR PEDIATRIC CANCER PATIENTS

Acute procedural pain

Psychological interventions for pediatric cancer pain have focused primarily on invasive treatment procedures, particularly bone marrow aspirations, venipunctures, and lumbar punctures. Because of the invasive and repeated nature of these procedures, and because many pediatric patients have a limited understanding of the nature or rationale for the treatment, pediatric patients often consider the treatment more painful than the disease [7–9]. Psychological approaches to reducing procedural pain include hypnosis, relaxation and imagery, cognitive techniques, and techniques that combine cognitive and behavioral strategies.

Hypnosis and relaxation/imagery techniques

A number of clinicians and researchers have explored the use of hypnotic and relaxation/imagery procedures for the reduction of procedural pain and distress in pediatric cancer patients. Children have been considered good candidates for hypnotic procedures because of their natural interest in and facility for fantasy and imaginative activities [10,11]. The use of progressive muscle relaxation training or other "nonhypnotic" relaxation procedures are less common in pediatric populations, especially at younger ages, though components of relaxation are often included in hypnotic procedures. Specifically, hypnosis for older children and adolescents usually includes inducing a physically relaxed state with suggestions for calm breathing, relaxation of muscle groups, the imagining of a peaceful and relaxing scene, and suggestions for comfort and pain reduction. However, younger children, usually below age ten, are commonly given a different type of hypnotic induction for dealing with pain-