

Adult Oncology Service Pain Management

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A. Study Purpose

The purpose of this study is twofold: to determine whether patients with pain admitted onto the adult oncology service are being adequately treated for their pain, and whether a brief educational session designed to improve house-staff management and a basic protocol involving the pain service of the department of anesthesiology could improve inpatient pain management.

Over the last 10-20 years, much work has been done to gauge the extent of pain in oncology patients, and guidelines have been established in an attempt to improve management. Approximately three quarters of patients with advanced cancer have pain, a great majority of whom can be treated successfully. A smaller but still significant percentage of patients in earlier stages of their disease also experience pain. In quarterly surveys of inpatients conducted by the department of anesthesiology at CPMC comparing patient satisfaction with pain control among different services, oncology patients consistently respond that their pain is treated inadequately. There are many reasons that this problem exists: factors pertaining to patient perceptions such as the fear of developing tolerance to pain medications or the fear of becoming addicted to them; factors pertaining to care givers such as lack of education about assessment and treatment of pain or fears of opiate toxicity.

In 1986, the WHO published basic guidelines on principles of pharmacologic management in patients experiencing pain. In 1994, the US Department of Health published more extensive guidelines on the management of cancer pain. The educational session and pain management protocol will incorporate these guidelines. The efficacy of this approach will be determined by serial questionnaires completed by patients.

B. Study Design

This study will be a prospective panel study. The Wisconsin Brief Pain Inventory (BPI), a scale specifically designed to assess cancer pain, will be administered upon presentation and again upon discharge to patients admitted "on service" (i.e. to be followed by medical house staff) in order to assess several important parameters of the patient's pain: the type, quality, intensity, and degree to which it interferes with his or her life. Patients with lung, prostate, or breast cancer will be eligible to enroll, since these types of cancer are both prevalent and frequently associated with pain. Patients who are admitted for "routine chemotherapy" or as part of a bone marrow transplant protocol will be excluded from the study, leaving a population of patients who are admitted with complications of the disease or treatment.

The first panel of patient scores will serve as a baseline and will provide a measure of the existing levels of pain upon presentation and discharge. The study panel will also be administered the BPI on admission and discharge. However, the several interventions will be initiated.

The house staff caring for the patient will receive a 15 minute educational lecture on video about the principles of pain management as set forth by the WHO in 1986. They will also receive a plastic pocket card containing dosages and equivalents of the various pain medications. A protocol will be instituted with the nursing staff and the pain service, the principles of which will be as follows: house staff will be asked to record in their daily note a pain intensity rating according to the Numeric Rating Scale (NRS), a simple 0-10 verbally administered scale. If the score are unacceptably high, they will alter their management accordingly and either ask the nurse to check or check themselves the NRS again in a suitable amount of time, generally 1-2 hours depending on the severity of the pain and type of intervention made. If the pain is not brought under control within approximately half a day to a day using WHO step III analgesics, they will be encouraged to call the pain service for help.

The degree to which these measures were carried out will be assessed by reviewing the charts to see whether the NRS was recorded in the chart and what action was taken. The overall efficacy of the program will be determined by comparing the admission BPI of the baseline panel with the study panel, and the discharge BPI's of each panel. Based on an estimated prevalence of 75% of study patients having pain, a variance of 50%, and a percentage change of 25%, the number of patient in each panel will be...

C. Study Drugs

NA

D. Medical Devices

NA

E. Study Questionnaires

The BPI, a well validated questionnaire regarding cancer pain as mentioned above will be administered to each patient on admission and discharge.

F. Subjects And Recruitment

See Study Design above for inclusion and exclusion criteria. Since the study involves no invasive procedures or medications, and the questionnaire involved is already a standard questionnaire in the field of oncology and pain control, I do not think it is necessary to obtain informed consent.