agents and aminoglycoside antibiotics,. should not be given simultaneously with CSA.

Other potential toxic effects include abdominal pain, nausea, paresthesias, tremors, gingival hyperplasia, hypertrichosis, liver dysfunction, and hyperuricemia. Non-Hodgkin's lymphoma and Kaposi's sarcoma have been seen in a small percentage of transplant patients.

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KEYS TO EFFECTIVE MANAGEMENT OF CHRONIC CANCER PAIN

The biggest problem in the management of cancer pain is undermedication. Yet, most patients who have chronic cancer pain can be treated effectively in the primary care setting with oral morphine, the opiate of choice because of the huge body of data regarding its use.

The key to success is frequent, around-the-clock (every 4 hours) dosing, titrated to the patient's estimate of pain control. Individual pharmacokinetics and responses vary considerably, and "standard" opiate dosage recommendations are unlikely to be effective.

"Rescue dosing" should be a part of the regimen. This allows the patient to take an extra dose or another medication if pain intervenes before the next scheduled around-the-clock opiate dose. Rescue dosing not only gives the patient more control over the pain, which reduces anxiety, but also is a way to monitor the efficacy of the around-the-clock dosage. Frequent rescue dosing may indicate that the patient is undermedicated, that he should be taking a different medication, or that intervening pain may be due to some new problem.

INDIVIDUAL PHARMACOKINETICS

Addiction is rarely a problem in this population, and the patient should be reassured of this. The concept of "saving up" medication until it is "really needed" is a myth that has been perpetrated among the health care professions as well as the general public. Safe, effective pain management consists of frequent small doses at regular intervals. Oral morphine, in dosages ranging from 2.5 mg to 180 mg every 4 hours, is reliable in 85% to 90% of patients with chronic cancer pain, but individual pharmacokinetics must be considered.

New, sustained-release morphine tablets are convenient, though expensive. It is important that the tablet be swallowed intact; otherwise, the timed-release action may be altered and result in respiratory depression. The slow-release tablet should be started after the patient has established good pain control with liquid morphine every 4 hours. To determine the twice-daily (every 12 hours) sustained-release dose, the total 24-hour liquid morphine dosage is divided by two. If necessary, morphine also can be given rectally, intramuscularly, intravenously, sublingually, or subcutaneously.

OTHER CAUSES OF PAIN

Not all cancer pain is opiate-responsive. The patient may also require other drugs for pain not responsive to opiates. Nonsteroidal anti-inflammatory drugs are used for bone pain. Corticosteroids may be needed for pain from nerve compression or extensive soft tissue infiltration. Phenothiazines are antiemetic but also sedate and are co-analgesic. Antidepressants are often useful.

It is important to detect other causes of pain, ifor example, osteoporosis or duodenal ulcer. Pain also can be a consequence of chemotherapy, radiation, or surgery. Proper pain management should help the patient tolerate these treatments. New or increasing back pain should be treated as an emergency to rule out spinal cord compression. If there are neurologic deficits, magnetic resonance imaging is best for confirming the diagnosis.

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