Chapter 3

Management of Patients with Gastrointestinal Disorders

3.1 Management of Patients with Oral Disorders

Disorders of the Teeth Dental plaque and caries

Tooth decay is an erosive process that begins with the action of bacteria on fermentable carbohydrates in the mouth, which produces acids that dissolve tooth enamel. The extent of damage to the teeth depends on the following:

The presence of dental plaque

- 1. The strength of the acids and the ability of the saliva to neutralize them
- 2. The length of time the acids are in contact with the teeth
- 3. The susceptibility of the teeth to decay

Dental plaque is a gluey, gelatin-like substance that adheres to the teeth. The initial action that causes damage to a tooth occurs under dental plaque.

Dental decay begins with a small hole, usually in a fissure (a break in the tooth's enamel) or in an area that is hard to clean.

Left unchecked, the affected area penetrates the enamel into the dentin. Because dentin is not as hard as enamel, decay progresses more rapidly and in time reaches the pulp.

When the blood, lymph vessels, and nerves are exposed, they become infected and an abscess may form, either within the tooth or at the tip of the root. Soreness and pain usually occur with an abscess.

As the infection continues, the patient's face may swell, and there may be pulsating pain.

The dentist can determine by x-ray studies the extent of damage and the type of treatment needed. Treatment for dental caries includes fillings, dental implants, and extractions. If treatment is not successful, the tooth may need to be extracted. In general, dental decay is associated with young people, but older adults are subject to decay as well, particularly from drug-induced or age-related oral dryness.

Prevention

Measures used to prevent and control dental caries include practicing effective mouth care, reducing the intake of starches and sugars (refined carbohydrates), applying fluoride to the teeth or drinking fluoridated water, refraining from smoking, controlling diabetes, and using pit and fissure sealants

Mouth care

- Healthy teeth must be conscientiously and effectively cleaned on a daily basis. Brushing and flossing are particularly effective in mechanically breaking up the bacterial plaque that collects around teeth.
- Normal mastication (chewing) and the normal flow of saliva also aid greatly in keeping the teeth clean. Because many ill patients do not eat adequate amounts of food, they produce less saliva, which in turn reduces this natural tooth cleaning process.
- The nurse may need to assume the responsibility for brushing the patient's teeth. In any case, merely wiping the patient's mouth and teeth with a swab is ineffective.
- The most effective method is mechanical cleansing (brushing). If brushing is impossible, it is better to wipe the teeth with a gauze pad, then have the patient swish an antiseptic mouthwash several times before expectorating into an emesis basin.
- A soft-bristled toothbrush is more effective than a sponge or foam stick. The lips may be coated with a water-soluble gel to prevent drying.

Diet

Dental caries may be prevented by decreasing the amount of sugar and starch in the diet. Patients who snack should be encouraged to choose less cariogenic alternatives, such as fruits, vegetables, nuts, cheeses, or plain yogurt.

Fluoridation

Fluoridation of public water supplies has been found to decrease dental caries. Some areas of the country have natural fluoridation; other communities have added fluoride to public water supplies.

Fluoridation may be achieved also by having a dentist apply a concentrated gel or solution to the teeth, adding fluoride to home water supplies, using fluoridated toothpaste or mouth rinse, or using sodium fluoride tablets, drops, or lozenges.

Pit and fissure sealants

The occlusal surfaces of the teeth have pits and fissures, areas that are prone to caries. Some dentists apply a special coating to fill and seal these areas from potential exposure to cariogenic processes. These sealants last up to 7 years.

Gerontologic Considerations. Oral Problems

Many medications taken by the elderly cause dry mouth, which is uncomfortable, impairs communication, and increases the risk of oral infection. These medications include the following:

- 1. Diuretics
- 2. Antihypertensive medications
- 3. Anti-inflammatory agents
- 4. Antidepressant medications

Poor dentition can exacerbate problems of aging, such as

- 1. Decreased food intake
- 2. Loss of appetite
- 3. Social isolation
- 4. Increased susceptibility to systemic infection (from periodontal disease)
- 5. Trauma to the oral cavity secondary to thinner, less vascular oral mucous membranes

Patient education. Preventive oral hygiene

Brush teeth using a soft toothbrush at least two times daily. Hold toothbrush at a 45-degree angle between the brush and the gums and teeth. A small brush is better than a large brush. Gums and tongue surface should be brushed.

- Floss at least once daily.
- Use an antiplaque mouth rinse.

- Visit a dentist at least every 6 months, or when you have a chipped tooth, a lost filling, an oral sore that persists longer than 2 weeks, or a toothache.
- Avoid alcohol and tobacco products, including smokeless tobacco.
- Maintain adequate nutrition and avoid sweets.
- Replace toothbrush at first signs of wear, usually every 2 months.

Dentoalveolar Abscess or Periapical Abscess

- Periapical abscess, more commonly referred to as an abscessed tooth, involves the collection of pus in the apical dental periosteum (fibrous membrane supporting the tooth structure) and the tissue surrounding the apex of the tooth (where it is suspended in the jaw bone).
- The abscess has two forms: acute and chronic. Acute periapical abscess is usually secondary to a suppurative pulpitis (a pus-producing inflammation of the dental pulp) that arises from an infection extending from dental caries.
- The infection of the dental pulp extends through the apical foramen of the tooth to form an abscess around the apex.
- Chronic dentoalveolar abscess is a slowly progressive infectious process. It differs from the acute form in that the process may progress to a fully formed abscess without the patient's knowing it. The infection eventually leads to a "blind dental abscess," which is really a periapical granuloma. It may enlarge to as much as 1 cm in diameter.
- It is often discovered on x-ray films and is treated by extraction or root canal therapy, often with apicectomy (excision of the apex of the tooth root).

Clinical Manifestations

The abscess produces a dull, gnawing, continuous pain, often with a surrounding cellulitis and edema of the adjacent facial structures, and mobility of the involved tooth. The gum opposite the apex of the tooth is usually swollen on the cheek side. Swelling and cellulitis of the facial structures may make it difficult for the patient to open the mouth. In welldeveloped abscesses, there may be a systemic reaction, fever, and malaise.

Management

- In the early stages of an infection, a dentist or dental surgeon may perform a needle aspiration or drill an opening into the pulp chamber to relieve tension and pain and to provide drainage. Usually, the infection will have progressed to a periapical abscess.
- Drainage is provided by an incision through the gingiva down to the jawbone. Pus (purulent material) escapes under pressure. This procedure is commonly performed in the dentist's office, but it may be performed in an outpatient surgery center or a same-day surgery department.
- After the inflammatory reaction has subsided, the tooth may be extracted or root canal therapy performed. Antibiotics may be prescribed.

Nursing Management

The nurse assesses the patient for bleeding after treatment and instructs the patient to use a warm saline or warm water mouth rinse to keep the area clean. The patient is also instructed to take antibiotics and analgesics as prescribed, to advance from a liquid diet to a soft diet as tolerated, and to keep follow-up appointments.

Disorders of the Jaw Temporomandibular Disorders

Temporomandibular disorders are categorized as follows:

- 1. Myofascial pain: a discomfort in the muscles controlling jaw function and in neck and shoulder muscles
- 2. Internal derangement of the joint: a dislocated jaw, a displaced disc, or an injured condyle
- 3. Degenerative joint disease: rheumatoid arthritis or osteoarthritis in the jaw joint

Diagnosis and treatment of temporomandibular disorders remain somewhat ambiguous, but the condition is thought to affect about 10 million people in the United States. Misalignment of the joints in the jaw and other problems associated with the ligaments and muscles of mastication are thought to result in tissue damage and muscle tenderness. Suggested causes include arthritis of the jaw, head injury, trauma or injury to the jaw or joint, stress, and malocclusion (although research does not support malocclusion as a cause).

Clinical Manifestations

Patients have pain ranging from a dull ache to throbbing, debilitating pain that can radiate to the ears, teeth, neck muscles, and facial sinuses. They often have restricted jaw motion and locking of the jaw. They may hear clicking and grating noises, and chewing and swallowing may be difficult. Depression may occur in response to these symptoms.

Assessment and Diagnostic Findings

Diagnosis is based on the patient's subjective symptoms of pain, limitations in range of motion, dysphagia, difficulty chewing, difficulty with speech, or hearing difficulties. Magnetic resonance imaging, x-ray studies, and an arthrogram may be performed.

Management

Although some practitioners think the role of stress in temporomandibular joint (TMJ) disorders is overrated, patient education in stress management may be helpful (to reduce grinding and clenching of teeth).

Patients may also benefit from range-of-motion exercises. Pain management measures may include nonsteroidal anti-inflammatory drugs (NSAIDs), with the possible addition of opioids, muscle relaxants, or mild antidepressants.

Occasionally, a bite plate or splint (plastic guard worn over the upper and lower teeth) may be worn to protect teeth from grinding; however, this is a short-term therapy.

Conservative and reversible treatment is recommended. If irreversible surgical options are recommended, the patient is encouraged to seek a second opinion.

SURGICAL MANAGEMENT

Correction of mandibular structural abnormalities may require surgery involving repositioning or reconstruction of the jaw. Simple fractures of the mandible without displacement, resulting from a blow on the chin, and planned surgical interventions, as in the correction of long or short jaw syndrome, may require treatment by these means. Jaw reconstruction may be necessary in the aftermath of trauma from a severe injury or cancer, both of which can cause tissue and bone loss.

Mandibular fractures are usually closed fractures. Rigid plate fixation (insertion of metal plates and screws into the bone to approximate and stabilize the bone) is the current treatment of choice in many cases of mandibular fracture and in some mandibular reconstructive surgery procedures.

Bone grafting may be performed to replace structural defects using bones from the patient's own ilium, ribs, or cranial sites. Rib tissue may also be harvested from cadaver donors.

Nursing Management

The patient who has had rigid fixation should be instructed not to chew food in the first 1 to 4 weeks after surgery. A liquid diet is recommended, and dietary counselling should be obtained to ensure optimal caloric and protein intake.

PROMOTING HOME AND COMMUNITY-BASED CARE

The patient needs specific guidelines for mouth care and feeding. Any irritated areas in the mouth should be reported to the physician. The importance of keeping scheduled appointments for assessing the stability of the fixation appliance is emphasized.

Consultation with a dietitian may be indicated so that the patient and family can learn about foods that are high in essential nutrients and ways in which these foods can be prepared so that they can be consumed through a straw or spoon, while remaining palatable. Nutritional supplements may be recommended.

Disorders of the Salivary Glands

Parotitis

Preventive measures are essential and include advising the patient to have necessary dental work performed before surgery. In addition, maintaining adequate nutritional and fluid intake, good oral hygiene, and discontinuing medications (eg, tranquilizers, diuretics) that can diminish salivation may help prevent the condition.

If parotitis occurs, antibiotic therapy is necessary. Analgesics may also be prescribed to control pain. If antibiotic therapy is not effective, the gland may need to be drained by a surgical procedure known as parotidectomy. This procedure may be necessary to treat chronic parotitis.

Sialadenitis

Sialadenitis (inflammation of the salivary glands) may be caused by dehydration, radiation therapy, stress, malnutrition, salivary gland calculi (stones), or improper oral hygiene. The inflammation is associated with infection by S. aureus, Streptococcus viridans, or pneumococcus. In hospitalized or institutionalized patients the infecting organism may be methicillin-resistant S. aureus (MRSA).

Symptoms include pain, swelling, and purulent discharge. Antibiotics are used to treat infections. Massage, hydration, and corticosteroids frequently cure the problem. Chronic sialadenitis with uncontrolled pain is treated by surgical drainage of the gland or excision of the gland and its duct.

Salivary Calculus (Sialolithiasis)

Sialolithiasis, or salivary calculi (stones), usually occurs in the submandibular gland. Salivary gland ultrasonography or sialography (x-ray studies filmed after the injection of a radiopaque substance into the duct) may be required to demonstrate obstruction of the duct by stenosis. Salivary calculi are formed mainly from calcium phosphate. If located within the gland, the calculi are irregular and vary in diameter from 3 to 30 mm. Calculi in the duct are small and oval.

Calculi within the salivary gland itself cause no symptoms unless infection arises; however, a calculus that obstructs the gland's duct causes sudden, local, and often colicky pain, which is abruptly relieved by a gush of saliva. This characteristic symptom is often disclosed in the patient's health history. On physical assessment, the gland is swollen and quite tender, the stone itself can be palpable, and its shadow may be seen on x-ray films.

The calculus can be extracted fairly easily from the duct in the mouth

The calculus can be extracted fairly easily from the duct in the mouth. Sometimes, enlargement of the ductal orifice permits the stone to pass spontaneously. Occasionally lithotripsy, a procedure that uses shock waves to disintegrate the stone, may be used instead of surgical extraction for parotid stones and smaller submandibular stones. Lithotripsy requires no anesthesia, sedation, or analgesia. Side effects can include local hemorrhage and swelling. Surgery may be necessary to remove the gland if symptoms and calculi recur repeatedly.

Neoplasms

- Although they are uncommon, neoplasms of almost any type may develop in the salivary gland. Tumors occur more often in the parotid gland. The incidence of salivary gland tumors is similar in men and women.
- Risk factors include prior exposure to radiation to the head and neck. Diagnosis is based on the health history and physical examination and the results of fine needle aspiration biopsy.
- Management of salivary gland tumors evokes controversy, but the common procedure involves partial excision of the gland, along with all of the tumor and a wide margin of surrounding tissue.
- Dissection is carefully performed to preserve the facial nerve, although it may not be possible to preserve the nerve if the tumor is extensive. If the tumor is malignant, radiation therapy may follow surgery.
- Radiation therapy alone may be a treatment choice for tumors that are thought to be contained or if there is risk of facial nerve damage from surgical intervention.
- Chemotherapy is usually used for palliative purposes. Local recurrences are common, and the recurrent growth usually is more aggressive than the original. It has also been observed that patients with salivary gland tumors have an increased incidence of second primary cancers

Cancer of the Oral Cavity

Cancer of the oral cavity accounts for less than 2% of all cancer deaths in the United States. Men are afflicted more often than women; however, the incidence of oral cancer in women is increasing, possibly because they use tobacco and alcohol more frequently than they did in the past. The 5-year survival rate for cancer of the oral cavity and pharynx is 55% for whites and 33% for African Americans. Of the 7400 annual deaths from oral cancer, the distribution by site is estimated as follows: tongue, 1700; mouth, 2000; pharynx, 2100; other, 1600. Chronic irritation by a warm pipestem or prolonged exposure to the sun and wind may predispose a person to lip cancer.

Predisposing factors for other oral cancers are exposure to tobacco (including smokeless tobacco), ingestion of alcohol, dietary deficiency, and ingestion of smoked meats

Pathophysiology/ Cancer of the Oral Cavity

Malignancies of the oral cavity are usually squamous cell cancers. Any area of the oropharynx can be a site for malignant growths, but the lips, the lateral aspects of the tongue, and the floor of the mouth are most commonly affected.

Clinical Manifestations

- Many oral cancers produce few or no symptoms in the early stages. Later, the most frequent symptom is a painless sore or mass that will not heal. A typical lesion in oral cancer is a painless indurated (hardened) ulcer with raised edges.
- Tissue from any ulcer of the oral cavity that does not heal in 2 weeks should be examined through biopsy. As the cancer progresses, the patient may complain of tenderness; difficulty in chewing, swallowing, or speaking; coughing of blood-tinged sputum; or enlarged cervical lymph nodes.

Assessment and Diagnostic Findings

Diagnostic evaluation consists of an oral examination as well as an assessment of the cervical lymph nodes to detect possible metastases. Biopsies are performed on suspicious lesions (those that have not healed in 2 weeks).

High-risk areas include the buccal mucosa and gingiva for people who use snuff or smoke cigars or pipes. For those who smoke cigarettes and drink alcohol, high-risk areas include the floor of the mouth, the ventrolateral tongue, and the soft palate complex (soft palate, anterior and posterior tonsillar area, uvula, and the area behind the molar and tongue junction).

Medical Management

Management varies with the nature of the lesion, the preference of the physician, and patient choice. Surgical resection, radiation therapy, chemotherapy, or a combination of these therapies may be effective.

In cancer of the lip, small lesions are usually excised liberally; larger lesions involving more than one third of the lip may be more appropriately treated by radiation therapy because of superior cosmetic results. The choice depends on the extent of the lesion and what is necessary to cure the patient while preserving the best appearance. Tumors larger than 4 cm often recur.

Cancer of the tongue may be treated with radiation therapy and chemotherapy to preserve organ function and maintain quality of life. A combination of radioactive interstitial implants (surgical implantation of a radioactive source into the tissue adjacent to or at the tumor site) and external beam radiation may be used.

If the cancer has spread to the lymph nodes, the surgeon may perform a neck dissection. Surgical treatments leave a less functional tongue; surgical procedures include hemiglossectomy (surgical removal of half of the tongue) and total glossectomy (removal of the tongue).

Often cancer of the oral cavity has metastasized through the extensive lymphatic channel in the neck region (Fig. 1), requiring a neck dissection and reconstructive surgery of the oral cavity. A common reconstructive technique involves use of a radial forearm free flap (a thin layer of skin from the forearm along with the radial artery)



FIGURE 1 Lymphatic drainage of the head and neck

Nursing Management

- The nurse assesses the patient's nutritional status preoperatively, and a dietary consultation may be necessary. The patient may require enteral (through the intestine) or parenteral (intravenous) feedings before and after surgery to maintain adequate nutrition.
- If a radial graft is to be performed, an Allen test on the donor arm must be performed to ensure that the ulnar artery is patent and can provide blood flow to the hand after removal of the radial artery. The Allen test is performed by asking the patient to make a fist and then manually compressing the ulnar artery.
- The patient is then asked to open the hand into a relaxed, slightly flexed position. The palm will be pale. Pressure on the ulnar artery is released. If the ulnar artery is patent, the palm will flush within about 3 to 5 seconds.
- Postoperatively, the nurse assesses for a patent airway. The patient may be unable to manage oral secretions, making suctioning necessary. If grafting was included in the surgery, suctioning must be performed with care to prevent damage to the graft. The graft is assessed postoperatively for viability.
- Although color should be assessed (white may indicate arterial occlusion, and blue mottling may indicate venous congestion), it can be difficult to assess the graft by looking into the mouth. A Doppler ultrasound device may be used to locate the radial pulse at the graft site and to assess graft perfusion.

Nursing Process: The Patient with Conditions Of The Oral Cavity

Assessment

Obtaining a health history allows the nurse to determine the patient's learning needs concerning preventive oral hygiene and to identify symptoms requiring medical evaluation. The history includes questions about the patient's normal brushing and flossing routine; frequency of dental visits; awareness of any lesions or irritated areas in the mouth, tongue, or throat; recent history of sore throat or bloody sputum; discomfort caused by certain foods; daily food intake; use of alcohol and tobacco, including smokeless chewing tobacco; and the need to wear dentures or a partial plate

A careful physical assessment follows the health history

A careful physical assessment follows the health history. Both the internal and the external structures of the mouth and throat are inspected and palpated. Dentures and partial plates are removed to ensure a thorough inspection of the mouth.

In general, the examination can be accomplished by using a bright light source (penlight) and a tongue depressor. Gloves are worn to palpate the tongue and any abnormalities.

LIPS

The examination begins with inspection of the lips for moisture, hydration, color, texture, symmetry, and the presence of ulcerations or fissures. The lips should be moist, pink, smooth, and symmetric.

The patient is instructed to open the mouth wide; a tongue blade is then inserted to expose the buccal mucosa for an assessment of color and lesions. Stensen's duct of each parotid gland is visible as a small red dot in the buccal mucosa next to the upper molars.

GUMS

The gums are inspected for inflammation, bleeding, retraction, and discoloration. The odor of the breath is also noted. The hard palate is examined for color and shape.

TONGUE

The dorsum (back) of the tongue is inspected for texture, color, and lesions. A thin white coat and large, vallate papillae in a "V" formation on the distal portion of the dorsum of the tongue are normal findings. The patient is instructed to protrude the tongue and move it laterally. This provides the examiner with an opportunity to estimate the tongue's size as well as its symmetry and strength (to assess the integrity of the 12th cranial nerve [hypoglossal]).

Further inspection of the ventral surface of the tongue and the floor of the mouth is accomplished by asking the patient to touch the roof of the mouth with the tip of the tongue. Any lesions of the mucosa or any abnormalities involving the frenulum or superficial veins on the undersurface of the tongue are assessed for location, size, color, and pain. This is a common area for oral cancer, which presents as a white or red plaque, an indurated ulcer, or a warty growth.



FIGURE 2 Structures of the mouth, including the tongue and palate

A tongue blade is used to depress the tongue for adequate visualization of the pharynx. It is pressed firmly beyond the midpoint of the tongue; proper placement avoids a gagging response. The patient is told to tip the head back, open the mouth wide, take a deep breath, and say "ah." Often this flattens the posterior tongue and briefly allows a full view of the tonsils, uvula, and posterior pharynx (Fig. 2). These structures are inspected for color, symmetry, and evidence of exudate, ulceration, or enlargement. Normally, the uvula and soft palate rise symmetrically with a deep inspiration or "ah"; this indicates an intact vagus nerve (10th cranial nerve).

A complete assessment of the oral cavity is essential because many disorders, such as cancer, diabetes, and immunosuppressive conditions resulting from medication therapy or AIDS, may be manifested by changes in the oral cavity. The neck is examined for enlarged lymph nodes (adenopathy).

Nursing Diagnoses

Based on all the assessment data, major nursing diagnoses may include the following:

- 1. Impaired oral mucous membrane related to a pathologic condition, infection, or chemical or mechanical trauma (eg, medications, ill-fitting dentures)
- 2. Imbalanced nutrition, less than body requirements, related to inability to ingest adequate nutrients secondary to oral or dental conditions
- 3. Disturbed body image related to a physical change in appearance resulting from a disease condition or its treatment
- 4. Fear of pain and social isolation related to disease or change in physical appearance
- 5. Pain related to oral lesion or treatment
- 6. Impaired verbal communication related to treatment
- 7. Risk for infection related to disease or treatment
- 8. Deficient knowledge about disease process and treatment plan

Planning and Goals

The major goals for the patient may include improved condition of the oral mucous membrane, improved nutritional intake, attainment of a positive self-image, relief of pain, identification of alternative communication methods, prevention of infection, and understanding of the disease and its treatment.

Nursing Interventions

PROMOTING MOUTH CARE

The nurse instructs the patient in the importance and techniques of preventive mouth care. If a patient cannot tolerate brushing or flossing, an irrigating solution of 1 teaspoon of baking soda to 8 ounces of warm water, half-strength hydrogen peroxide, or normal saline solution is recommended. The nurse reinforces the need to perform oral care and provides such care to patients who are unable to provide it for themselves.

If a bacterial or fungal infection is present, the nurse administers the appropriate medications and instructs the patient in how to administer the medications at home. The nurse monitors the patient's physical and psychological response

Xerostomia, dryness of the mouth, is a frequent sequela of oral cancer, particularly when the salivary glands have been exposed to radiation or major surgery. It is also seen in patients who are receiving psychopharmacologic agents, patients with HIV infection, and patients who cannot close the mouth and as a result become mouth-breathers.

- To minimize this problem, the patient is advised to avoid dry, bulky, and irritating foods and fluids, as well as alcohol and tobacco. The patient is also encouraged to increase intake of fluids (when not contraindicated) and to use a humidifier during sleep.
- The use of synthetic saliva, a moisturizing antibacterial gel such as Oral Balance, or a saliva production stimulant such as Salagen may be helpful.

Stomatitis, or mucositis, which involves inflammation and breakdown of the oral mucosa, is often a side effect of chemotherapy or radiation therapy. Prophylactic mouth care is started when the patient begins receiving treatment; however, mucositis may become so severe that a break in treatment is necessary.

• If a patient receiving radiation therapy has poor dentition, extraction of the teeth before radiation treatment in the oral cavity is often initiated to prevent infection. Many radiation therapy centers recommend the use of fluoride treatments for patients receiving radiation to the head and neck.

ENSURING ADEQUATE FOOD AND FLUID INTAKE

The patient's weight, age, and level of activity are recorded to determine whether nutritional intake is adequate. A daily calorie count may be necessary to determine the exact quantity of food and fluid ingested. The frequency and pattern of eating are recorded to determine whether any psychosocial or physiologic factors are affecting ingestion.

The nurse recommends changes in the consistency of foods and the frequency of eating, based on the disorder and the patient's preferences. Consultation with a dietitian can be helpful. The goal is to help the patient attain and maintain desirable body weight and level of energy, as well as to promote the healing of tissue.

1. SUPPORTING A POSITIVE SELF-IMAGE

- A patient who has a disfiguring oral condition or has undergone disfiguring surgery may experience an alteration in self-image.
- The patient is encouraged to verbalize the perceived change in body appearance and to realistically discuss actual changes or losses.
- The nurse offers support while the patient verbalizes fears and negative feelings (withdrawal, depression, anger). The nurse listens attentively and determines whether the patient's needs are primarily psychosocial or cognitive-perceptual.
- This determination will help the nurse to individualize a plan of care. The patient's strengths, achievements, and positive attributes are reinforced.
- The nurse should determine the patient's anxieties concerning relationships with others. Referral to support groups, a psychiatric liaison nurse, a social worker, or a spiritual advisor may be useful in helping the patient to cope with anxieties and fears.
- Emphasizing that the patient's worth is not diminished by a physical change in a body part can be a helpful approach. The patient's progress toward development of positive self-esteem is documented.
- The nurse should be alert to signs of grieving and should record emotional changes. By providing acceptance and support, the nurse encourages the patient to verbalize feelings.

2. MINIMIZING PAIN AND DISCOMFORT

- Oral lesions can be painful. Strategies to reduce pain and discomfort include avoiding foods that are spicy, hot, or hard (eg, pretzels, nuts).
- The patient is instructed about mouth care. It may be necessary to provide the patient with an analgesic such as viscous lidocaine (Xylocaine Viscous 2%) or opioids, as prescribed.
- The nurse can reduce the patient's fear of pain by providing information about pain control methods.

3. PROMOTING EFFECTIVE COMMUNICATION

- Verbal communication may be impaired by radical surgery for oral cancer. It is therefore vital to assess the patient's ability to communicate in writing before surgery.
- Pen and paper are provided postoperatively to patients who can use them to communicate.
- A communication board with commonly used words or pictures is obtained preoperatively and given after surgery to patients who cannot write so that they may point to needed items. A speech therapist is also consulted postoperatively.

4. PREVENTING INFECTION

- Leukopenia (a decrease in white blood cells) may result from radiation, chemotherapy, AIDS, and some medications used to treat HIV infection. Leukopenia reduces defense mechanisms, increasing the risk for infections.
- Malnutrition, which is also common among these patients, may further decrease resistance to infection. If the patient has diabetes, the risk of infection is further increased.
- Laboratory results should be evaluated frequently and the patient's temperature checked every 4 to 8 hours for an elevation that may indicate infection.
- Visitors who might transmit microorganisms are prohibited because the patient's immunologic system is depressed. Sensitive skin tissues are protected from trauma to maintain skin integrity and prevent infection. Aseptic technique is necessary when changing dressings.

- Desquamation (shedding of the epidermis) is a reaction to radiation therapy that causes dryness and itching and can lead to a break in skin integrity and subsequent infection.
- Adequate nutrition is helpful in preventing infection. Signs of wound infection (redness, swelling, drainage, tenderness) are reported to the physician. Antibiotics may be prescribed prophylactically.

5. PROMOTING HOME AND COMMUNITY-BASED CARE

5.1. Teaching Patients Self-Care

- The patient who is recovering from treatment of an oral condition is instructed about mouth care, nutrition, prevention of infection, and signs and symptoms of complications (Chart 35-2).
- Methods of preparing nutritious foods that are seasoned according to the patient's preference and at the preferred temperature are explained. For some patients, it may be more convenient to use commercial baby foods than to prepare liquid and soft diets.
- The patient who cannot take foods orally may receive enteral or parenteral nutrition; the administration of these feedings is explained and demonstrated to the patient and the care provider.
- For patients with cancer, instructions are provided in the use and care of any prostheses. The importance of keeping dressings clean is emphasized, as is the need for conscientious oral hygiene.

5.2. Continuing Care

- The need for ongoing care in the home depends on the patient's condition. The patient, the family members or others responsible for home care, the nurse, and other health care professionals (eg, speech therapist, nutritionist, psychologist) work together to prepare an individual plan of care.
- If suctioning of the mouth or tracheostomy tube is required, the necessary equipment is obtained and the patient and care providers are taught how to use it. Considerations include the control of odors and humidification of the home to keep secretions moist.

- The patient and the care providers are taught how to assess for obstruction, hemorrhage, and infection and what actions to take if they occur.
- The home care nurse may provide physical care, monitor for changes in the patient's physical status (eg, skin integrity, nutritional status, respiratory function), and assess the adequacy of pain control measures.
- The nurse also assesses the patient's and family's ability to manage incisions, drains, and feeding tubes and the use of recommended strategies for communication.
- The ability of the patient and family to accept physical, psychological, and role changes is assessed and addressed.
- Follow-up visits to the physician are important to monitor the patient's condition and to determine the need for modifications in treatment and general care.
- The nurse reinforces instructions in an effort to promote the patient's self-care and comfort. Because patients and their family members and health care providers tend to focus on the most obvious needs and issues, the nurse reminds the patient and family about the importance of continuing health promotion and screening practices. Those patients who have not been involved in these practices in the past are educated about their importance and are referred to appropriate health care providers.

Evaluation

EXPECTED PATIENT OUTCOMES

Expected patient outcomes may include:

- 1. Shows evidence of intact oral mucous membranes
 - a. Is free of pain and discomfort in the oral cavity
 - b. Has no visible alteration in membrane integrity
 - c. Identifies and avoids foods that are irritating (eg, nuts, pretzels, spicy foods)
 - d. Describes measures that are necessary for preventive mouth care
 - e. Complies with medication regimen
 - f. Limits or avoids use of alcohol and tobacco (including smokeless tobacco)

- 2. Attains and maintains desirable body weight
- 3. Has a positive self-image
 - a. Verbalizes anxieties
 - b. Is able to accept change in appearance and modify selfconcept accordingly
- 4. Attains an acceptable level of comfort
 - a. Verbalizes that pain is absent or under control
 - b. Avoids foods and liquids that cause discomfort
 - c. Adheres to medication regimen
- 5. Has decreased fears related to pain, isolation, and the inability to cope
 - a. Accepts that pain will be managed if not eliminated
 - b. Freely expresses fears and concerns
- 6. Is free of infection
 - a. Exhibits normal laboratory values
 - b. Is afebrile
 - c. Performs oral hygiene after every meal and at bedtime
- 7. Acquires information about disease process and course of treatment

Thank You for Your Attention!