Either a septoplasty or a submucous resection may be done under local anesthesia to correct a deviated septum. Septoplasty involves incising one side of the septum, elevating the mucous membrane, and removing or straightening the deviated portion of septal cartilage. In a submucous resection, bone and cartilage are removed. In both procedures, packing is applied to both sides of the nose to prevent bleeding and to keep the septal mucosa in the midline position.

Small defects in the cribiform plate, fovea ethmoidalis, or sphenoid sinus associated with persistent CSF leakage may require endoscopic repair. Either a tissue graft or fibrin glue may be used to repair the defect. The graft or glue is held in place with absorbable packing. Large defects may require craniotomy for repair (Way & Doherty, 2003).

**NURSING CARE**

**Health Promotion**

Teach all people, children and adolescents in particular, about the importance of wearing helmets and facial protectors when participating in high-risk sports such as football, hockey, and baseball catching. Promote the use of seat belts with shoulder harness and air bags in vehicles to reduce the risk of facial injury in motor vehicle crashes.

**NURSING CARE PLAN  A Client with Nasal Trauma**

Clifton Kavanaugh is a 36-year-old mailman who broke his nose when he was hit in the face by a baseball. He is admitted to the emergency department accompanied by a friend.

**ASSESSMENT**

Mr. Kavanaugh presents with obvious deformity of the nose. It is swollen, bloody, and deviated to one side. The nose is bleeding slightly. Mr. Kavanaugh rates the pain as a 6 on a scale of 1 to 10. Vital signs are BP 132/70, P 120 and regular, R 22, T 98.6°F (37°C) axillary.

Mr. Kavanaugh is breathing through his mouth and holding an ice compress to his nose. Bony crepitus and edema are felt on palpation. There is no evidence of CSF leak from either nose or ears. X-ray confirms a nasal fracture.

**DIAGNOSES**

- Acute Pain related to nasal fracture
- Ineffective Breathing Pattern related to nasal swelling and bleeding
- Anxiety related to pain and need for emergency care
- Disturbed Body Image related to nasal deformity

**EXPECTED OUTCOMES**

- Verbalize relief of pain.
- Maintain a patent airway and normalize the breathing pattern.
- Demonstrate reduced anxiety.
- Express concerns about potential body image change.

**PLANNING AND IMPLEMENTATION**

- Administer analgesics as ordered.
- Apply ice compress to nose.
- Inspect oropharynx for evidence of bleeding.
- Encourage deep, slow breathing through the mouth.
- Provide oral hygiene.
- Discuss concerns regarding injury.
- Assist with nasal splint application.

**EVALUATION**

Following treatment, Mr. Kavanaugh reports his pain has decreased to a level of 2 on a scale of 1 to 10. He appears more relaxed, no longer grimacing and with a relaxed posture. His respirations are easy at 18. The nasal splint is intact. Mr. Kavanaugh is able to look in a mirror and state with a laugh, “I look like a raccoon.” He is admitted to the hospital for rhinoplasty.

**CRITICAL THINKING IN THE NURSING PROCESS**

1. A client in the emergency department with nasal trauma becomes extremely panicky because of blood draining down his throat. How would you intervene to reduce this client’s anxiety without using nasal suction? Why is it important to avoid suctioning the nasopharynx in the client with nasal trauma?
2. Develop a plan of care for the client with a leak of CSF from a nasal fracture.
3. Compare immediate versus delayed rhinoplasty for the client with nasal fracture.

See Evaluating Your Response in Appendix C.