Nursing Process

Assessment

Assess the client's condition in relation to ophthalmic disorders.

- Determine whether the client has impaired vision and, if so, the extent or severity of the impairment. Minimal assessment includes the vision-impaired client's ability to participate in activities of daily living, including safe ambulation. Maximal assessment depends on the nurse's ability and working situation. Some nurses do vision testing and ophthalmoscopic examinations.
- Identify risk factors for eye disorders. These include trauma, allergies, infection in one eye (a risk factor for infection in the other eye), use of contact lenses, infections of facial structures or skin, and occupational exposure to chemical irritants or foreign bodies.
- Signs and symptoms vary with particular disorders:
  - Pain is usually associated with corneal abrasions or inflammation. Sudden, severe pain may indicate acute glaucoma, which requires immediate treatment to lower intraocular pressure and minimize damage to the optic nerve.
  - Signs of inflammation (redness, edema, heat, tenderness) are especially evident with infection or inflammation of external ocular structures, such as the eyelids and conjunctiva. A watery or mucoid discharge also often occurs.
  - Pruritus is most often associated with allergic conjunctivitis.
  - Photosensitivity commonly occurs with keratitis.

Nursing Diagnoses

- Disturbed Sensory Perception: Visual, related to eye disorders
- Risk for Injury: Blindness related to inadequately treated glaucoma or ophthalmic infections
- Deficient Knowledge related to prevention and treatment of ocular disorders

Planning/Goals

The client will:

- Take ophthalmic medications as prescribed
- Follow safety precautions to protect eyes from trauma and disease
- Experience improvement in signs and symptoms (eg, decreased drainage with infections, decreased eye pain with glaucoma)
- Avoid injury from impaired vision (eg, falls)
- Avoid systemic effects of ophthalmic drugs
- Have regular eye examinations to monitor effects of antiglaucoma drugs

Interventions

Use measures to minimize ocular disorders.

- Promote regular eye examinations. This is especially important among middle-aged and older adults, who are more likely to have several ocular disorders. They are also more likely to experience ocular disorders as adverse effects of drugs taken for nonocular disorders.
- Assist clients at risk of eye damage from increased intraocular pressure (eg, those with glaucoma; those who have had intraocular surgery, such as cataract removal) to avoid straining at stool (use laxatives or stool softeners if needed), heavy lifting, bending over, coughing, and vomiting when possible.
- Promote handwashing and keeping hands away from eyes to prevent eye infections.
- Cleanse contact lenses or assist clients in lens care, when needed.
- Treat eye injuries appropriately:
  - For chemical burns, irrigate the eyes with copious amounts of water as soon as possible (ie, near the area where the injury occurred). Do not wait for transport to a first aid station, hospital, or other health care facility. Damage continues as long as the chemical is in contact with the eye.
  - For thermal burns, apply cold compresses to the area.
  - Superficial foreign bodies may be removed by irrigation with water. Foreign bodies embedded in ocular structures must be removed by a physician.
- Warm, wet compresses are often useful in ophthalmic inflammation or infections. They relieve pain and promote healing by increasing the blood supply to the affected area.

Evaluation

- Observe and interview for compliance with instructions regarding drug therapy and follow-up care.
- Observe and interview for relief of symptoms.
- Observe for systemic adverse effects of ophthalmic drugs (eg, tachycardia and dysrhythmias with adrenergics; bradycardia or bronchoconstriction with beta blockers).

PRINCIPLES OF THERAPY

General Guidelines

1. Topical application is the most common route of administration for ophthalmic drugs, and correct administration is essential for optimal therapeutic effects.
2. Systemic absorption of eye drops can be decreased by closing the eye and applying pressure over the tear duct (nasolacrimal occlusion) for 3 to 5 minutes after instillation.
3. When multiple eye drops are required, there should be an interval of 5 to 10 minutes between drops because of limited eye capacity and rapid drainage into tear ducts.

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