BPG 03: Eye Care

Statement of Best Practice

Patient's eyes are clean and optimum comfort and function is maintained

1: Introduction

Normal physiological mechanisms provide protection against eye injury and infection. The conjunctiva, the thin protective layer of epithelium that forms a mucous membrane covering the anterior surface of the eye, protects the eye from mechanical injury and infection. The cornea lies immediately under the conjunctiva and is essential to admitting and refracting light to the lens, and therefore vital to sight. As the cornea is avascular it is very slow to heal if injured. Severe conjunctival injuries may cause opacity and blindness[6]. Although attention has been focused in prevention of nosocomial infections, comparatively little attention has been focused on the prevention of microbial keratitis [1]. The purpose of this guideline is to inform nursing practice related to the provisions of eye care in critically ill patients and thus minimise the prevalence of ocular surface disorders in this group of patients.

2: Potential Risks

The critically ill patient is more susceptible than most patients in developing eye problems, for the following reasons:

- Mechanical ventilation leads to the retention of body fluid, which in turn leads to increased venous pressure producing oedematous eyes.[4]

- Paralysis and sedation prevent patients from carrying out important physiological eye protection mechanisms[6]. The blink mechanism becomes diminished with the consequence that tears are not effectively dispersed over the eye.

- Tear production and dispersion are important in the prevention of infection and the maintenance of the structural integrity of the eye[5]. Tears maintain a moist environment for the surface epithelium of the cornea, lubricate the eye lids, wash away foreign material and cell debris, and prevent adherence of organisms to the ocular surface. Tears contain proteins such as immunoglobulin, lysozyme and lactoferrin that inhibit bacterial growth.

- The side effects of some drug therapies are known to contribute to dry eyes; including atropine, some antihistamines and tricyclic antidepressants.

- Eye care is vital to prevent ocular complications such as exposure kerotopathy – incomplete closure of the eye.

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3: Standards of Care

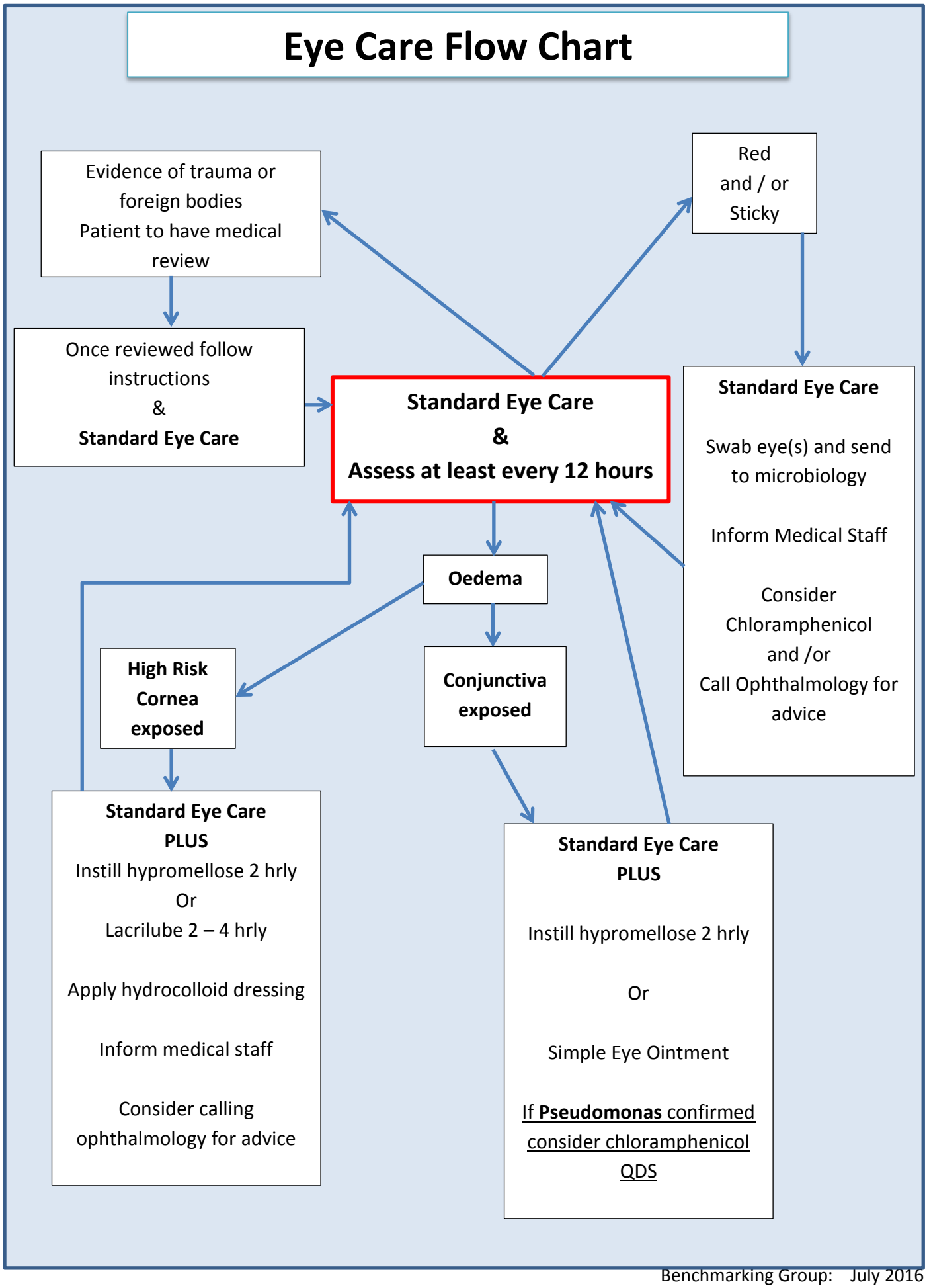
Check patients' assessment documentation for abnormalities normally present, e.g. cataracts, prior to proceeding with eye assessment and care. An initial eye assessment should be undertaken within 2 hours following admission and at least every 12 hours[5].

Standard Eye Care
Patient awake and able to blink;
1. Allow patient to perform own eye care (or with assistance when required) by cleaning eyes as part of the patient facial wash or at patients request. 2. If eyes become sticky or encrusted use sterile gauze and saline / water.
Sedated patient, difficulty blinking;
1. Clean eyes at least every 4 hours with saline soaked gauze and the administration of an eye specific lubricant. 2. Clean from inner aspect of lids by the nose and sweep across the lids to outer aspect to prevent infection / debris being introduced into the lachrymal system. 3. Clean along both sets of lashes; do not drag debris across surface of the eye. 4. Use new gauze swab each time and for each eye.
Sedated & paralysed patient (unable to blink)
1. Follow steps 1-4 for sedated patient but perform care 2 hourly 2. Apply hydrocolloid eye dressing cutting to cover the whole eye.

Physical Feature	Assessment Tool	Observation
Eye Lashes	Visual Observation	Observe for stickiness, debris in lashes, lashes turning in.
Eye Lids	Visual Observation	Observe for trauma, oedema, and ability to open eye, lacerations or lower lid turning in or out.
Conjunctiva	Visual Observation, ask patient to open their eyes.	Observe for oedema, and any redness around cornea or all over. Sub-conjunctival haemorrhage.
Cornea / Iris	Visual Observation pen torch or ophthalmoscope	Check to see if the cornea is hazy, cloudy or foreign bodies present or iris is discoloured.
Pupil	Visual Observation pen torch or ophthalmoscope	Check pupil reaction, size, shape, white (possible cataract)
Anterior chamber	Visual Observation pen torch or ophthalmoscope	Check for blood flow or pus in anterior chamber. Is it shallow or flat?

After the initial assessment and subsequent assessments using the above guide, follow the eye care flow chart and if appropriate provide standard eye care.[4]

Eye Care Flow Chart



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