Case PkPWNTFFPyYprsu10754 — Questions

Case Details

Demographics 34-year-old Asian female; housekeeper

Chief complaint eye pain

History of present illness

Secondary complaints/symptoms none

Patient ocular history last eye exam 5 years ago; unremarkable

Family ocular history unremarkable

Patient medical history history of gastrointestinal bleeding

Medications taken by patient Maalox®, multivitamins

Patient allergy history penicillin

Family medical history father: cardiovascular disease

Review of systems

Mental status

Clinical findings

Uncorrected visual acuity

Slit lamp

IOPs: OD:13 mmHg, OS: 12 mmHg @ 3:35 pm by iCare tonometer

Fundus OD

Fundus OS

- Character/signs/symptoms: eye is painful, watery, and sensitive to light
- Location: OD
- Severity: severe
- Nature of onset: acute
- Duration: 5 minutes (patient ran over from a house down the street)
- Frequency: constant
- Exacerbations/remissions: better if she keeps her eyes closed, worse with blinking
- Relationship to activity or function: a bottle of vinegar dropped and the contents splashed into her eye
- Accompanying signs/symptoms: blurred vision
- Constitutional/general health: denies
- Ear/nose/throat: denies
- Cardiovascular: denies
- Pulmonary: denies
- Dermatological: denies
- Gastrointestinal: denies
- Genitourinary: denies
- Musculoskeletal: denies
- Neuropsychiatric: denies
- Endocrine: denies
- Hematologic: denies
- Immunologic: denies
- Orientation: oriented to time, place, and person
- Mood: appropriate
- Affect: appropriate
- OD: VA distance: 20/30
- OS: VA distance: 20/20
- lids/lashes/adnexa: unremarkable OD, OS
- conjunctiva: see image 1 OD, normal OS
- cornea: see image 1 OD, clear OS
- anterior chamber: deep and quiet OD, OS
- iris: normal OD, OS
- lens: clear OD, OS
- vitreous: clear OD, OS
- C/D: 0.25 H/ 0.25 V
- macula: normal
- posterior pole: normal
- periphery: unremarkable
- C/D: 0.25 H/ 0.25 V
- macula: normal
- posterior pole: normal
- periphery: unremarkable

Question 1 / 5

Which of the following BEST describes the solution that caused the corneal chemical burn in this patient?

A) Acidic solution with a pH > 10
B) Irritant with a neutral pH
C) Alkaline solution with a pH < 4
D) Alkaline solution with a pH > 10
E) Acidic solution with a pH < 4

Question 2 / 5

Which of the following is TRUE regarding the pathophysiology of ocular chemical burns?

A) Alkaline burns are typically confined to superficial tissues
B) Acidic burns occur more frequently than alkali burns
C) Acids tend to bind with tissue proteins and coagulate the surface epithelium
D) Acidic burns may continue to penetrate the cornea long after the initial trauma

Question 3 / 5

Which of the following best describes the FIRST action that should be taken when a patient with an ocular chemical burn presents to your office?

A) Copious irrigation with saline solution
B) Copious irrigation with a weak basic solution to neutralize the acidic chemical
C) Copious irrigation with a weak acidic solution to neutralize the alkaline chemical
D) Detailed case history
E) Careful examination of the corneas with slit-lamp biomicroscope

Question 4 / 5

Which of the following topical medications is NOT indicated in the treatment of patients suffering from a corneal chemical burn?

A) Scopolamine
B) Pilocarpine
C) Prednisolone acetate
D) Ketorolac
E) Moxifloxacin

Question 5 / 5

Which of the following oral pain management medications should be used with caution in this patient?

A) Advil®
B) Aleve®
C) Tylenol®
D) Aspirin®
E) Motrin®