

Case wZrzOVisOhlCjpC14743 — Questions

Case Details

Demographics 14-year-old white female; student

Chief complaint referred by another optometrist for corneal collagen cross-linking evaluation

History of present illness

Secondary complaints/symptoms itchy eyes

Patient ocular history last eye exam 1 month ago

Family ocular history unremarkable

Patient medical history seasonal allergies

Medications taken by patient Zyrtec® PRN

Patient allergy history NKDA

Family medical history mother: breast cancer

Review of systems

Mental status

Clinical findings

Habitual spectacle Rx

Pupils: PERRL, negative APD

EOMs: full, no restrictions OU

Confrontation fields: full to finger counting OD, OS

Subjective refraction

Topography: OD: see images 1 & 2, OS: see images 3 & 4

Slit lamp

IOPs: OD: 12 mmHg, OS: 12 mmHg @ 10:15 am by Goldmann applanation tonometry

Fundus OD

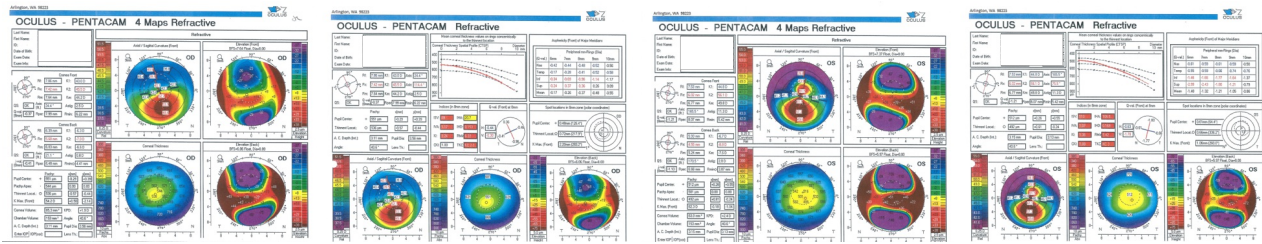
Fundus OS

Blood pressure: 110/64 mmHg, right arm, sitting

Pulse: 60 bpm, regular

- Character/signs/symptoms: worsening vision at all distances
- Location: OD, OS
- Severity: moderate (OS worse than OD)
- Nature of onset: gradual
- Duration: 6 months
- Frequency: constant
- Exacerbations/remissions: none
- Relationship to activity or function: struggling at school with seeing the board and reading
- Accompanying signs/symptoms: halos around lights; mostly at night
- Constitutional/general health: denies
- Ear/nose/throat: occasional runny nose and sinus congestion
- 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: +0.75 -0.75 x 090; VA distance: 20/40, PH 20/30
- OS: +1.00 -1.00 x 105; VA distance: 20/70, PH 20/60
- OD: +0.50 -1.50 x 085; VA distance: 20/30
- OS: plano -3.00 x 110; VA distance: 20/60
- lids/lashes/adnexa: unremarkable OD, OS
- conjunctiva: normal OD, OS
- cornea: faint Vogt striae OD, OS
- anterior chamber: deep and quiet OD, OS
- iris: normal OD, OS
- lens: clear OD, OS
- vitreous: clear OD, OS

- C/D: 0.20 H/0.20 V
- macula: normal
- posterior pole: normal
- periphery: unremarkable
- C/D: 0.20 H/0.20 V
- macula: normal
- posterior pole: normal
- periphery: unremarkable



Question 1 / 5

Based on the refractive data and corneal topographies, what is the BEST diagnosis for this patient's right and left eyes?

- A) Terrien's marginal degeneration
- B) Keratoconus
- C) Pellucid marginal degeneration
- D) Forme fruste keratoconus
- E) Keratoglobus

Question 2 / 5

Based on the patient's age and clinical findings, which eye(s) would benefit from undergoing corneal collagen cross-linking (CXL)?

- A) Both eyes
- B) Neither eye
- C) Right eye only
- D) Left eye only

Question 3 / 5

After removal of the corneal epithelium in patients undergoing corneal collagen cross-linking,, what is the minimum residual corneal thickness required to maintain the integrity of the corneal endothelium (according to the standard protocol)?

- A) 400 microns
- B) 300 microns
- C) 200 microns
- D) 500 microns
- E) 250 microns
- F) 350 microns

Question 4 / 5

Which of the following is considered a relative contraindication for corneal collagen cross-linking?

- A) Glaucoma
- B) Prior history of INTACS
- C) Prior history of herpes keratitis
- D) Prior history of LASIK
- E) Diabetes

Question 5 / 5

When explaining corneal collagen cross-linking to the patient and her parents, which of the following statements BEST describes the ultimate goal of the procedure?

- A) To slow down or halt the progression of her eye disease
- B) To improve her best corrected vision with her glasses
- C) To prevent her from requiring rigid gas-permeable contact lenses
- D) To allow her to be able to wear soft contact lenses

E) To correct her refractive error

F) To allow her to be a candidate for LASIK in the future