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Anterior segment diseases presented in an interactive videotape format

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Abstract

With the overwhelming amount of information provided in ocular disease courses, it is often useful to have a convenient method for supplementing course material. With this in mind, a videotape has been produced which will serve as a convenient and effective teaching aid for second year students. Rather than a simple presentation of facts, this tape is formatted in a manner that encourages participative learning. The student extracts the relevant facts from the case history, forms her/his own diagnosis, observes the recorded eye condition, makes a differential diagnosis and develops a treatment plan. All of this information is available within the tape itself.

Degree Type

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Diane P. Yolton

Subject Categories

Optometry

ANTERIOR SEGMENT DISEASES PRESENTED IN AN
INTERACTIVE VIDEOTAPE FORMAT
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Advisor: Diane P. Yolton, O.D.

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Submitted by: Robert M. Paluska

Robert M. Paluska

Mark A. Plumb

Mark A. Plumb

BIOGRAPHIES

MARK A. PLUMB received his B.A. in Business Administration with an emphasis in Marketing from Washington State University, Pullman, Washington in May 1988. He is a candidate for an O.D. degree at Pacific University College of Optometry in May of 1994. His future plans involve completing a Veterans Administration Residency in Chicago, Illinois, and acting upon opportunities that arise during that year. Prior to this he was a no good bum and will admit this upon questioning.

ROBERT M. PALUSKA received his B.S. in Animal Sciences from Oregon State University, Corvallis, Oregon in June of 1988. He is a candidate for an O.D. degree at Pacific University College of Optometry in May of 1994. His future plans involve the sales of optometric practices that he has no ownership in and enjoy the future at various golf courses.

DIANE P. YOLTON, O.D., is an associate professor of optometry at Pacific University College of Optometry in Forest Grove, Oregon. She graduated from Pacific University with a an O.D. degree. Prior to this she graduated from the University of Texas with a Ph.D. in microbiology. A big guns advocate, she instructs in Ocular disease and is an advisor for Pacific's Ocular Disease and Special Testing Center.

ABSTRACT

With the overwhelming amount of information provided in ocular disease courses, it is often useful to have a convenient method for supplementing course material. With this in mind, a videotape has been produced which will serve as a convenient and effective teaching aid for second year students.

Rather than a simple presentation of facts, this tape is formatted in a manner that encourages participative learning. The student extracts the relevant facts from the case history, forms her/his own diagnosis, observes the recorded eye condition, makes a differential diagnosis and develops a treatment plan. All of this information is available within the tape itself.

ACKNOWLEDGMENTS

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Other contributors deserve special mention for their participation in the actual recordings of the anterior segment conditions: Dr. Cristina M. Schnider, Dr. Mark A. Williams, and Dr. Carol A. Timpone. To all, our sincere thanks.

We would be remiss if we failed to acknowledge our families. For their tolerance of our absence, for their freely offered encouragement, for their unfailing support well beyond their marital obligations, and for their faith in us and our task, our grateful thanks.

Finally, we wish to publicly acknowledge our pets Tiffany, Bo, and Sammi who came aboard as friends willing to lend emotional support whenever needed. Their dedication was unsurpassed so they naturally became welcomed members to the team of thesis project contributors, many, many thanks.

Design

This tape presents nine patients seen in Pacific University's Ocular Disease and Special Testing center located in Portland, Oregon. For each patient, subjective and objective findings taken from the patient's file are presented along with approximately 30 seconds of slit lamp recording delineating the most important feature(s) of the patient's problem. The diagnosis and plan which are presented next were formulated not only from patient files, but also from referencing various texts and class notes as listed in the bibliography.

Students can take the tape home and view it at their leisure allowing for learning to occur in an individualized manner and at their own pace.

Instructions for use of interactive videotape and the findings that are on the video are located in Appendix 1.

Appendix 1
Plumb/ Paluska Thesis
Anterior Segment Disease Videotape

Welcome to the Anterior segment videotape.

The tape contains 9 separate anterior segment cases. The subjective and objective findings are presented in each case. Your job is to try to formulate an initial diagnosis, differential diagnosis and plan of action.

Instructions to help you through each case.

1. Put videotape in machine and start with patient #1. Patient one will be located at the beginning of the tape.
2. You will be presented with the age, gender and chief complaint.
3. After viewing this brief information, pause the videotape and review the more detailed objective findings presented in this supplement.
4. Next you are instructed to formulate a tentative diagnosis from the information provided. After doing so, confirm your suspicions by viewing the recording of the actual disease. The correct diagnosis is given 5 seconds following the anterior segment presentation.
5. Now that a correct diagnosis has been confirmed, you will be instructed to pause the videotape and try to come up with a differential diagnoses.
6. Continue the videotape to view the differential diagnoses.
7. At this point you will pause the videotape and develop a plan of treatment.
8. Continue the videotape to have the correct plan of action revealed.
9. Congratulations. You are now done with the first case. Continue the videotape to view subsequent cases and repeat steps 2 - 8.
10. As a courtesy for other students, please rewind the tape when finished.

Patient #1

SUBJECTIVE:

NAME: Steven A. Martin **AGE:** 53 **SEX:** Male

CHIEF COMPLAINT: Acute onset for past two weeks. Stinging/ Burning/ Photophobia associated with RGP contact lenses. Must turn head right or left to achieve clear vision. Lens is uncomfortable after 12 hours of wear.

OCULAR HISTORY: Diplopia and flair when looking at lights with contact lenses on. Also notices halos around lights. Negative flashes/ floaters. Removed lenses for one week due to discomfort. "feels like contact lenses are stuck on my eye." Good VA in morning worse at night. Has worn RGP's for one year. (Previous 30 year PMMA wearer).

MEDICAL HISTORY: Unremarkable
MEDICATIONS: None
ALLERGIES: None

OBJECTIVE:

ENTRANCE TESTING:

UNAIDED DISTANCE VA:
OD: 20/300
OS: 20/300
OU: 20/200

NEAR VA:
OD: 20/20
OS: 20/20
OU: 20/20

COVER TEST: Distance: Ortho Near: Ortho
PUPILS: OU: Round and brisk reactions; Negative M. Gunn.

OCULAR MOTILITIES: Smooth, accurate, full and extensive

CONFRONTATIONAL VISUAL FIELDS: Full with no restrictions

REFRACTION:

	OD:		OS:	
Best Visual Acuity (Distance)	20/25-		20/30-	
Best Visual Acuity (Near):	20/20		20/20	

ANTERIOR SEGMENT EVALUATION:

	OD	OS
LID / LASHES	Clear	Clear
CONJUNCTIVA	+1 injection	+1 injection
SCLERA	Clear	Clear
CORNEA*	OS: +2 Central punctate staining with Fluorescein	
	OU: +1 Limbal neovascularization	

* PRESENTATION FURTHER DEMONSTRATED ON VIDEO TAPE.

ANT. CHAMBER

ANGLES	OU:	Grade 4
AQUEOUS	OU:	No cells and/ or flare
IRIS	OU:	Brown and clear
LENS	OU:	Clear

ADDITIONAL TESTS: Fluorescein stain

	OD	OS
IOP: METHOD: GOLDMAN	13 mm.	13 mm.
Time: 2:15 PM		

POSTERIOR SEGMENT:

POSTERIOR POLE

	OD	OS
OPTIC NERVE		
C/D:	.3/.3	.3/.3
DEPTH:	3 D.	3 D.

MARGINS:	OU:	Clear and distinct
	OU:	Scleral crescent
HUE:	OU:	Orange
MACULAR AREA:	OU:	Clear
FLR:	OD:	+ 1 OS: + 1
VASCULAR:	OU:	3/4 A-V ratio
	OU:	neg. hypertensive or arteriosclerotic changes
PERIPHERAL RETINA:	OD:	Lattice degeneration, Snail tracking, Chorioretinal scar, located 5 DD. at 10 o'clock
	OS:	Clear.
ADDITIONAL TESTS:	N/A	
VITREOUS:	OU:	Clear
VISUAL FIELDS:	N/A	

Try to formulate diagnosis by history alone. After doing so, confirm your suspicions by viewing video tape.

Note: Correct diagnosis (the answer) is given 5 seconds following anterior segment presentation.

Diagnosis for Patient #1

1. Central Corneal Clouding due to contact lens wear. ie. low oxygen permeability, tight lens.

**************What are the Differential Dx's.*****************

DDx.

1. None

**************** How would you treat this patient?***************

Plan:

1. Remove current contact lenses, give loaner spectacles and RTC in one week to assess corneal health for new lens fitting 1 week.
2. Refit with a thin, High Dk value RGP lens.
3. Build up wear time
4. Assess lens fit with fluorescein
5. Re educate patient on cleaning regiment and have patient demonstrate their understanding.

Patient #2

SUBJECTIVE:

NAME: Sue Lynn Chowmein **AGE:** 47 **SEX:** Female

CHIEF COMPLAINT: Patient referred to ODST to evaluate flashes of lights. Starts in OD and goes to OS. Lasts 25 minutes and has been happening for past 20 years. Patient happened to poke herself 4 1/2 hours prior to eye exam in right eye. Now is concerned with bright red "bloody look" on nasal side of eye. She's never had anything like this before. OD feels scratchy and pulsating like. Feels best when she keeps her eyes shut all the time.

OCULAR HISTORY: Last visual exam 1986. Glasses used for distance. OD -2.25 SPH and OS -2.00 - .25 X 085. Ocular migraines not associated with cluster type HA's. HA mostly on right side accompanied by nausea and vomiting has them in clusters. Previous O.D. told her she had aniseikonia.

MEDICAL HISTORY: Unremarkable
MEDICATIONS: Allergies to Penicillin and Sulfa drugs.
ALLERGIES: Peanuts, Soap, cat fur and dust.

OBJECTIVE:
ENTRANCE TESTING:
HABITUAL DISTANCE VA: OD: 20/40+2 **Pinhole:** OD: 20/25+2
OS: 20/25-2 OS: 20/20-2

NEAR VA: OD: 20/40
OS: 20/30
OU: 20/25

COVER TEST: Distance: xo phoric Near: xo phoric
PUPILS: OU: Round and brisk reactions 3 mm. Negative M. Gunn.

OCULAR MOTILITIES: Smooth, accurate, full and extensive

REFRACTION:
Best Visual Acuity (Distance) OD: 20/20-2 OS: 20/20-1
Best Visual Acuity (Near): OD: 20/25 OS: 20/20

ANTERIOR SEGMENT EVALUATION:	OD	OS
LID / LASHES	OU: Clear	
***CONJUNCTIVA**	+4 injection*	+1 INJECTION

* PRESENTATION FURTHER DEMONSTRATED ON VIDEO TAPE.

	OD	OS
SCLERA	*not visible 2-7 o'clock	Clear
CORNEA	Punctate staining	Clear

ANT. CHAMBER

ANGLES	OU:	GRADE 3
AQUEOUS	OU:	No cells and/ or flare
IRIS	OU:	Blue and clear; no holes
LENS	OU:	Clear

	OD	OS
IOP: METHOD: GOLDMAN	16 mm.	16 mm.
TIME: 2:16 PM		

POSTERIOR SEGMENT:

POSTERIOR POLE

	OD	OS
OPTIC NERVE:		
C/D:	.3/.4	.3/.4
DEPTH:	3 D.	3 D.

MARGINS:	OU:	clear and distinct
	OU:	Scleral crescent
HUE:	OU:	Orange
MACULAR AREA:	OU:	Clear
FLR:	OU:	+ 3
VASCULAR:	OU:	2/3 A-V ratio
	OU:	Neg. hypertensive or arteriosclerotic changes
PERIPHERAL RETINA:	OU:	Clear
ADDITIONAL TESTS:		N/A
VITREOUS:	OU:	Clear
VISUAL FIELDS:	N/A	

Try to formulate diagnosis by history alone. After doing so, confirm your suspicions by viewing video tape.

Note: Correct diagnosis (the answer) is given 5 seconds following anterior segment presentation.

Diagnosis for Patient #2

1. Subconjunctival hemorrhage

**************What are the Differential Dx's.*****************

DDx.

1. Kaposi's sarcoma (red or purple lesion beneath the conjunctiva, usually elevated slightly. These patients should be evaluated for AIDS)
2. Other conjunctival neoplasms (e.g. , lymphoma) with secondary hemorrhage.
3. Valsalva like maneuvers (coughing, sneezing, vomiting, strangulation, constipation, seizure)
4. Systemic Causes (e.g., vascular disease, high blood pressure, leukemia)
5. Rule out conjunctival lesion.
6. In traumatic cases; rule out ruptured globe
7. If recurrent subconjunctival hemorrhages (more than 2 within 1 year, obtain blood work-up and medical consult.)
8. Acute Hemorrhagic conjunctivitis due to bacterial conjuctivides (Pneumococcus and Haemophilus), Adenoviral conjunctivitis
9. Idiopathic most common

**************** How would you treat this patient?***************

Plan:

1. Explain slow resolution (by color: Bright red, orange, blackish then clear) over 1 to 3 weeks, dense blood may take longer 3-6 weeks.
2. Artificial tears Q 2h or PRN until redness clears
3. Alternating hot/cold compresses may aid in re absorption QID.
4. RTC 1 week if patient is concerned. Otherwise RTC PRN and/or in one year for complete visual exam

Patient #3

SUBJECTIVE:

NAME: Bruce Lee **AGE:** 73 **SEX:** Male

CHIEF COMPLAINT: "Three days ago my left eye started itching but doesn't hurt and I also think that my left eyelid is a little swollen. When I get up in the morning my left eye feels sticky like syrup and I wash it out with water."

OCULAR HISTORY: Bought bifocals from department store three years ago.

MEDICAL HISTORY: Growth removed from left ear three years ago. Last medical exam was 8 years ago. Good results.

MEDICATIONS: None

ALLERGIES: None

OBJECTIVE:

ENTRANCE TESTING:

UNAIDED

DISTANCE VA:
OD: 20/60
OS: 20/50
OU: 20/40

NEAR VA:
OD: 20/200
OS: 20/120
OU: 20/160

PINHOLE: OU: 20/40

COVER TEST: Distance: xo phoric Near: xo phoric

PUPILS:
OU: Round and brisk reactions
OU: 3 mm. round. Negative M. Gunn.

OCULAR MOTILITIES: Smooth, accurate, full and extensive

CONFRONTATIONAL FIELDS: Not performed

REFRACTION:

Best Visual Acuity (Distance) OD -1.00D sph 20/30
OS -1.00D sph 20/30

Best Visual Acuity (Near): +3.00D add
OD 20/25 OS 20/25

ANTERIOR SEGMENT EVALUATION:

LID / LASHES
OD: White flakes, yellow crust mucus secretions +2
OU: Plugged Meibomian glands.

LOWER LID
OS: Bump tender to touch inside lid
OU: Palbebral lid edema and inferior lid hyperemia.

	OD	OS
CONJUNCTIVA	+1 injection	+2 Injection lower conj.

* PRESENTATION FURTHER DEMONSTRATED ON VIDEO TAPE.

SCLERA	OU: Clear	
CORNEA	Trace SPK	Diffuse +1 SPK
ANT. CHAMBER	OU: Clear	
ANGLES	OU: Grade 4	
AQUEOUS	OU: No cells and / or flare	
IRIS	OU: Hazel and clear; no holes	
LENS	OU: +1 Nuclear Sclerosis	
ADDITIONAL TESTS:	Signs of Acne Rosacea with no previous history of treatment.	
IOP: METHOD: GOLDMAN **Time:** 12:05 PM	12 mm.	12 mm.

POSTERIOR SEGMENT:

POSTERIOR POLE

	OD	OS
OPTIC NERVE		
C/D:	.3/.4	.3/.4
DEPTH:	3 D.	3 D.
MARGINS:	OU: Clear and distinct	
HUE:	OU: Orange	
MACULAR AREA:	OU: Clear	
FLR:	+ 2	+ 2
VASCULAR:	OU: 2/3 A-V ratio	
	OU: Neg. hypertensive or arteriosclerotic changes	
PERIPHERAL RETINA:	OU: Clear	
ADDITIONAL TESTS:	N/A	
VITREOUS:	OU: Clear	
VISUAL FIELDS:	N/A	

Try to formulate diagnosis by history alone. After doing so, confirm your suspicions by viewing video tape.

Note: Correct diagnosis (the answer) is given 5 seconds following anterior segment presentation.

Diagnosis for Patient #3

1. Acne Rosacea
2. Staph Blepharitis OS > OD
3. Plugged Meibomian Glands OU
4. Internal Hordeolum OS lower lid

**************What are the Differential Dx's.*****************

DDx.

1. Staph Blepharitis
2. Chalazion- non painful sterile inflammation of the Meibomian gland
3. External Hordeolum - points outward from the lid.
4. Neoplasia

**************** How would you treat this patient?***************

Plan:

1. Photo Document
2. Hot compresses TID for 2 weeks. RTC 1 weeks
3. Express Meibomian glands BID to QID. Educate patient
4. Educate patient
5. Bacitracin UNG OS AM and HS
6. Ophthalmic lubricants
7. Systemic Tetracycline 250 mg. QID

Patient #4

SUBJECTIVE

NAME: Greg Nicholas **AGE:** 43 **SEX:** Male

CHIEF COMPLAINT: "I went to a New Years Party and my friend opened up a bottle of Champagne. The cork flew across the room and hit me in my right eye." Patient complains of ocular pain and had noticed a "growth" over his right eye almost immediately.

OCULAR HISTORY: Last visual exam 2 years ago. Doesn't wear glasses.

MEDICAL HISTORY: Unremarkable
MEDICATIONS No medication allergies
ALLERGIES Shellfish

OBJECTIVE:
ENTRANCE TESTING:
HABITUAL
DISTANCE VA: OD: 20/20
OS: 20/20
OU: 20/15

NEAR VA: OD: 20/20
OS: 20/20
OU: 20/20

COVER TEST: Distance: Ortho Near: xo phoric
PUPILS: OU: 3 mm. round and brisk reactions. Negative M. Gunn.

OCULAR MOTILITIES: OU: Smooth, accurate, full and extensive

CONFRONTATIONAL FIELDS: OU: No scotomas

REFRACTION:
Best Visual Acuity (Distance)-0.25 D Sph OU OD 20/15 OS 20/15
Best Visual Acuity (Near) OD 20/20 OS 20/20

ANTERIOR SEGMENT EVALUATION:

	OD	OS
LID / LASHES	OU: Clear	
***CONJUNCTIVA**	+2 injection*	+1 INJECTION

* PRESENTATION FURTHER DEMONSTRATED ON VIDEO TAPE.

	OD	OS
SCLERA	*injection of scleral vessels	Clear
CORNEA	Sub epithelial corneal infiltrates	Clear

ANT. CHAMBER			
ANGLES	OU:	GRADE 3	
AQUEOUS	OU:	No Cells and / or flare	
IRIS	OU:	Brown no holes in iris	
LENS	OU:	Clear	
ADDITIONAL TESTS:	Instable tear film.	OD:	TBUT less than 10 sec
		OS:	TBUT greater 15 sec
IOP: METHOD: GOLDMAN	18 mm.		17 mm.
Time: 4:36 PM			

POSTERIOR SEGMENT:

	OD	OS
POSTERIOR POLE		
OPTIC NERVE		
C/D:	.1/.1	.1/.1
DEPTH:	2 D.	2 D.

MARGINS:	OU:	Clear and distinct
HUE:	OU:	Red/orange
MACULAR AREA:	OU:	Clear
FLR:	OU:	+ 3
VASCULAR:	OU:	3/4 A-V ratio Neg. hypertensive or arteriosclerotic changes
PERIPHERAL RETINA:	OU:	Clear
ADDITIONAL TESTS	N/A	
VITREOUS:	OU:	Clear

Try to formulate diagnosis by history alone. After doing so, confirm your suspicions by viewing video tape.

Note: Correct diagnosis (the answer) is given 5 seconds following anterior segment presentation.

Diagnosis for Patient #4

1. Symblepharon

**************What are the Differential Dx's.*****************

DDx.

1. Chemical Burns
2. Steven Johnson's Syndrome lips are typically swollen and crusted
3. Trauma
4. Chronic topical drugs example: epinephrine, pilocarpine, antiviral agents
5. Long standing inflammation
6. Ocular Pemphigoid.

**************** How would you treat this patient?***************

Plan:

1. Artificial tears, refresh PM, drops 4-10 x / day. UNG Hs.
2. Refer to Ophthalmologist for surgical excision and cosmetic consult if bothers patient's field of view or visual acuity.

Patient #5

SUBJECTIVE:

NAME: Brian Delgato **AGE:** 48 **SEX:** Male

CHIEF COMPLAINT: I got a stick poked in my eye 28 years ago and I had a couple of operations but those doctors didn't tell me anything. I want to know now if I will be able to have my eye fixed now.

OCULAR HISTORY: 28 years ago patient treated for penetrating foreign object (tree limb). Severe pain, photophobia, red eye tearing. Corneal stromal opacity. +4 corneal edema. Previous history of treatment for corneal and lens trauma (aphake, vitrectomy, retinal detachment).

MEDICAL HISTORY: Unremarkable
MEDICATIONS: Aspirin
ALLERGIES: Ragweed, pollen, dust and dog hair.

OBJECTIVE:
ENTRANCE TESTING:
UNAIDED
DISTANCE VA:
OD: no light perception
OS: 20/20-
OU: 20/20-

NEAR VA:
OD: no light perception
OS: 20/20
OU: 20/20

COVER TEST: Distance: n/a Near: n/a
PUPILS:
OD: no light perception.
OS: Round and brisk reactions.

OCULAR MOTILITIES: Smooth, accurate, full and extensive OS

CONFRONTATIONAL VISUAL FIELDS: Full with no restrictions OS

REFRACTION:
Best Visual Acuity (Distance) OD: no light perception OS: 20/15
Best Visual Acuity (Near): OD: no light perception OS: 20/20

ANTERIOR SEGMENT
EVALUATION:

	OD	OS
LID / LASHES	Clear	Clear
CONJUNCTIVA	+2 injection	+1 injection
SCLERA*	Clear	Clear

CORNEA*
OS: Clear
OD: +4 neovascularization, complete opacification of cornea

* PRESENTATION FURTHER DEMONSTRATED ON VIDEO TAPE.

ANT. CHAMBER

ANGLES	OD:	no view possible	OS:	Grade 3
AQUEOUS	OD:	no view possible	OS:	No cells and/ or flare
IRIS	OD:	no view possible	OS:	Brown and clear
LENS	OD:	aphakic	OS:	Clear

ADDITIONAL TESTS: B-scan confirmed retinal complete detachment

	OD	OS
IOP: METHOD: GOLDMAN	10 mm.	15 mm.
Time: 2:28 PM		

POSTERIOR SEGMENT:

POSTERIOR POLE

	OD	OS
OPTIC NERVE		
C/D:	no view	.3/.3
DEPTH:	no view	3 D.

MARGINS:	OD:	no view	OS:	Clear and distinct
HUE:	OD:	no view	OS:	Orange
MACULAR AREA:	OD:	no view	OS:	Clear
FLR:	OD:	no view	OS:	+ 1
VASCULAR:	OD:	no view	OS:	3/4 A-V ratio
	OS:	neg. hypertensive or arteriosclerotic changes		
PERIPHERAL RETINA:	OD:	no view		
	OS:	Clear.		
VITREOUS:	OD:	no view	OS:	Clear
VISUAL FIELDS:	OS:	Humphrey's 30-2, no scotomas or depressions.		

Try to formulate diagnosis by history alone. After doing so, confirm your suspicions by viewing video tape.

Note: Correct diagnosis (the answer) is given 5 seconds following anterior segment presentation.

Diagnosis for Patient #5

1. Secondary fungal infection OD.
2. No functional vision remaining OD.

**************What are the Differential Dx's.*****************

DDx.

1. None

**************** How would you treat this patient?***************

Plan:

1. Prosthetic contact lens shell OD, for cosmetics.
2. Polycarbonate lenses for prophylactic protection of remaining vision.
3. No antibiotic therapy necessary. Fungal infection sequeled years ago.

Patient #6

Subjective:

NAME: Thomas Young **AGE:** 45 **SEX:** Female

CHIEF COMPLAINT: She complains that vision is blurry near and far. Letters seem to be pushed together. Feels like she needs some backup glasses and just wants to have her eyes checked. "I also feel like I have sand in my eyes all the time."

OCULAR HISTORY: New glasses two years ago for distance. Doesn't like the glasses because they hurt her ears.

MEDICAL HISTORY: Two random blood sugar tests were completed a year ago. All tests were within normal limits

FAMILY HISTORY: Diabetes Grandmother; Hypertension, mother.

MEDICATIONS: Allerest™ taken for allergies, Topical Hydrocortisone UNG for rash on arm.

ALLERGIES: Dust and pollen

OBJECTIVE:

ENTRANCE TESTING:

HABITUAL DISTANCE VA:

OD. -375-2.50x175 OS -4.50-3.00x175
OD: 20/25
OS: 20/30
OU: 20/25

NEAR VA:

OD: 20/25 Add of + 1.50 D
OS: 20/25
OU: 20/25

COVER TEST: Far: .5 xo phoric Near: 6 xo phoric

PUPILS: OU: Round and brisk reactions, Negative M. Gunn.

OCULAR MOTILITIES: Smooth, accurate, full and extensive

VISUAL FIELDS: OU: Overall scattered depressions. Fields are unreliable due to high number of false negative errors.

ANTERIOR SEGMENT EVALUATION:

	OD	OS
LID / LASHES:	CLEAR	CLEAR
CONJUNCTIVA:	+1 injection	+2 INJECTION

OU: Positive rose bengal staining +2
OU: Fluorescein staining +1

SCLERA: OU: Clear

CORNEA: OU: Clear

ANT. CHAMBER:

ANGLES:	OU:	GRADE 4
AQUEOUS:	OU:	No cells and / or flare
IRIS:	OU:	Blue and clear, no holes
LENS:	OU:	Clear

ADDITIONAL TESTS: Amsler Grid, Color testing both tested normal.
**See videotape for part of therapy,

	OD	OS
IOP: METHOD: Goldman	10 mm.	10 mm. March 1990
Time: 3:20 PM	20 mm.	20 mm December 1992

POSTERIOR SEGMENT:

POSTERIOR POLE

	OD	OS
OPTIC NERVE		
C/D:	.3/.4	.2/.3
DEPTH:	3 D.	3 D.

MARGINS:	OU:	Clear and distinct
	OU:	Scleral crescent
HUE:	OU:	Orange
MACULAR AREA:	OU:	Clear
FLR:	+ 3	+ 3
VASCULAR:	OU:	2/3 A-V ratio
	OU:	Neg. hypertensive or arteriosclerotic changes
PERIPHERAL RETINA	OU:	Clear
VITREOUS:	OU:	Clear

Try to formulate diagnosis by history alone. After doing so, confirm your suspicions by viewing video tape.

Note: Correct diagnosis (the answer) is given 5 seconds following anterior segment presentation.

Diagnosis for Patient #6

1. Keratoconjuntivitis Sicca

**************What are the Differential Dx's.*****************

DDx.

1. Bacterial
2. Viral
3. Drug or immunological hypersensitivity
4. Mechanical or irritation
5. systemic manifestations ie. Ocular Pemphigoid, Steven Johnson's syndrome
6. geographical patterns of corneal staining ie. Herpes simplex
7. Toxic Staph reaction
8. Entropion
9. Exposure Keratitis
10. Allergic ie. Vernal Keratitis.
11. Hormonal changes ie. Menopause. Birth control pills

**************** How would you treat this patient?***************

Plan:

1. Repeat visual fields with emphasis on good patient instruction. Run a demo if needed.
2. Diurnal IOP analysis needed.
3. Reevaluate Optic nerve head cup disk ratios with 78 or 90D lens
4. Dilation and DFE.
5. Tear break up evaluation with Fluorescein.
6. Insert collagen Punctal plugs lower lids first. RTC 1 week for assessment of therapy.
7. Ocular lubricants. Artificial tears Q 1-2h or PRN, Refresh PM UNG. HS OU.

Patient #7

SUBJECTIVE:

NAME: Paul Heavy **AGE:** 33 **SEX:** Male

CHIEF COMPLAINT: Complaint of left eye RGP. Had to take it off for the past two days because the eye felt dry. Complains of not ever having contact lenses that work well for his visual acuities. He also complains of a maximum wearing schedule for 6 hours per day and has associated photophobia. Has also noticed that some days the VA's are better in one eye then the other. (Alternating)

OCULAR HISTORY: Has worn glasses since 8 year old
RGP contact lens wearer. 8 years.
Previous Hx. of chronic Blepharitis
given Naphcon A for allergies by Ophthalmologist.
KCS

MEDICAL HISTORY: Mild Asthma, family history of arthritis, diabetes Mother controlled with meds., father has hypertension. on controlled meds

MEDICATIONS: 200 mg. of Theophaline HS , inhaler, Provendil

ALLERGIES: Drug allergy to tetracycline. , ragweed molds and dust.

OBJECTIVE:

ENTRANCE TESTING:

Habitual

DISTANCE VA:

OD. -13.00 -6.00 x 1 OS -13.00-6.00x 050
OD: 20/40
OS: 20/40
OU: 20/30

NEAR VA:

OD: 20/30
OS: 20/30
OU: 20/30

COVER TEST: Far: xo phoric Near: xo phoric

PUPILS: OD: Round and brisk reactions 3 mm.
Negative M. Gunn.

OCULAR MOTILITIES: OU: Smooth, accurate, full and extensive

CONFRONTATIONAL FIELDS: Not performed

ANTERIOR SEGMENT EVALUATION: OD OS

LID / LASHES OU: Clear

CONJUNCTIVA	OU:	+1 injection
	OU:	Concretions in inferior palpebral
	OU:	+2 hyperemia
	OU:	+3 tear debris
	OU:	+2 marginal edema 360°
	OU:	Bulbar conj. Vessels dilated

* PRESENTATION FURTHER DEMONSTRATED ON VIDEO TAPE.

SCLERA	OU:	Clear
CORNEA	OD:	Central corneal scarOS:
	OD:	Slight corneal staining central
	OS:	Inferior FI staining
	OU:	Corneal Fleischer's ring
		+1 striae OU

ANT. CHAMBER

ANGLES	OU:	Grade 3
AQUEOUS	OU:	No cells and/ or flare.
IRIS	OU:	Brown and clear no holes
LENS	OU:	Clear

ADDITIONAL TESTS: Apical touch on contact lens evaluation.
Bubble noted inferior.

	OD:	OS:
IOP: METHOD: AO NCT	14 mm.	15 mm.
TIME: 3:20 PM		

POSTERIOR SEGMENT:

POSTERIOR POLE

	OD	OS
OPTIC NERVE:		
C/D:	.3/.3	.3/.3
DEPTH:	2 D.	2 D.

MARGINS:	OU:	Clear and distinct, scleral crescent
HUE:	OU:	Orange
Macular Area:	OU:	Clear
FLR:	OU:	+ 3
VASCULAR:	OU:	2/3 A-V ratio
	OU:	Neg. hypertensive or arteriosclerotic changes
PERIPHERAL RETINA:	OU:	Clear
ADDITIONAL TESTS:	N/A	

VITREOUS: OU: Clear

Try to formulate diagnosis by history alone. After doing so, confirm your suspicions by viewing video tape.

Note: Correct diagnosis (the answer) is given 5 seconds following anterior segment presentation.

Diagnosis for Patient #7

1. Keratoconus

**************What are the Differential Dx's.*****************

DDx.

1. Munson's sign.
2. Pellucid marginal degeneration- the cornea protrudes above the band of thinning
3. Keratoglobus - Rare uniform circular thinning of the cornea with maximum corneal thinning in mid periphery.

**************** How would you treat this patient?****************

Plan:

1. Patients are instructed not to rub their eyes
2. Refit with a specific RGP consider Piggy back contact lenses
3. Corneal transplant surgery when CL's no longer produce satisfactory vision due to scarring. (Thermal Keratoplasty, Epikeratophakia or Lamellar keratoplasty)
4. Hypertonic Saline
5. RTC 1 week or PRN to assess the contact lens fit and patient education.

Patient #8

SUBJECTIVE:

NAME: Tuwanda Simmer **AGE**: 23 **SEX**: Female

CHIEF COMPLAINT: "I have scratchy and sore eyes. they have also been tearing a lot more. My left eye is worse than my right. Also my eyes are red but my left eye is always redder. My vision isn't as clear as it used to be. Bright lights bother me a lot too."

OCULAR HISTORY: Unremarkable

MEDICAL HISTORY: Unremarkable
MEDICATIONS: None
ALLERGIES: None

OBJECTIVE:
ENTRANCE TESTING:
Habitual

DISTANCE VA:	OD:	20/30	Pinhole 20/20 OU
	OS:	20/25	
	OU:	20/25	
NEAR VA:	OD:	20/20	
	OS:	20/20	
	OU:	20/20	
PUPILS:	OU:	Round and brisk reactions; 3 mm, Negative M. Gunn.	
	OS:	Marked Photophobia	
OCULAR MOTILITIES:	OU:	Smooth, accurate, full and extensive	
CONFRONTATIONAL FIELDS:	OU:	Full to finger counting	

ANTERIOR SEGMENT

EVALUATION:	OD	OS
LID / LASHES:	Clear	Follicles, crusty Skin lesions inferior lid Serous discharge
***CONJUNCTIVA:**	+1 injection	+2 injection
SCLERA:	OU: Clear	
CORNEA:	OD: Clear	OS: Epithelial lesions noticed *

* PRESENTATION FURTHER DEMONSTRATED ON VIDEO TAPE.

ANT. CHAMBER:

ANGLES:	OU:	Grade 3
AQUEOUS:	OU:	No cells and/ or flare
IRIS:	OU:	Blue and clear; no holes
LENS:	OU:	Clear

ADDITIONAL TESTS: OS: Whisp demonstrated hypoasthesia
Lymphadenopathy of the left side of the face.

IOP: METHOD: GOLDMAN 13 mm. 13 mm.
Time: 4:44 PM

POSTERIOR SEGMENT:

POSTERIOR POLE:

	OD	OS
OPTIC NERVE:		
C/D:	.3/.3	.3/.3
DEPTH:	2 D.	2 D.

MARGINS: OU: Clear and distinct

HUE: OU: Orange/red
MACULAR AREA: OU: Clear
FLR: OU: + 3
VASCULAR: OU: 2/3 A-V ratio
OU: Neg. hypertensive or arteriosclerotic changes

PERIPHERAL RETINA: OU: Clear
ADDITIONAL TESTS: N/A

VITREOUS: OU: Clear

Try to formulate diagnosis by history alone. After doing so, confirm your suspicions by viewing video tape.

Note: Correct diagnosis (the answer) is given 5 seconds following anterior segment presentation.

Diagnosis for Patient #8

1. Primary Ocular herpes simplex with follicular conjunctivitis, Epithelial Keratitis, and Lid vesicles OS with recent history of genital lesions.

**************What are the Differential Dx's.****************

DDx.

1. Herpes Zoster virus- vesicles along a dermatomal distribution of the face, not crossing the midline. Pain is usually present.
2. Recurrent Corneal Erosion - Often the history of corneal abrasion or Map dot fingerprint Dystrophy. Pain usually upon awakening.
3. contact lens related pseudodendrites- No skin involvement and the dendrites don't branch.

**************** How would you treat this patient?***************

Plan:

1. Topical Acyclovir UNG for the skin lesions qid.
2. Warm compresses to skin lesions TID
3. Viroptic 1% drops QID
4. Possible oral Acyclovir 200 mg. 5 x/day for 1 to 2 weeks.
5. Patient Education. Discuss possibility of ocular recurrence 20-30% chance which is most likely to reoccur within one year.

Patient #9

SUBJECTIVE:

NAME: Mark O Polo **AGE:** 37 **SEX:** Male

CHIEF COMPLAINT: Gradual vision decrease in my left eye beginning 5 years ago. In the past 3 years, it got so bad that all I could see is light. "Now I don't see #$@#@ out of that bum eye."

OCULAR HISTORY: Negative pain or trauma to eye.

MEDICAL HISTORY: Broken left toe.
MEDICATIONS: None
ALLERGIES: None

OBJECTIVE:
ENTRANCE TESTING:
Habitual
DISTANCE VA:
OD: 20/20
OS: no light perception

NEAR VA:
OD: 20/20
OS: no light perception
OU: 20/20

PUPILS: OD 4.5 mm. round and brisk
* OS 3 mm. distorted/irregular pupil. Slow response to light and accommodation.

Positive Afferent Pupillary defect.

OCULAR MOTILITIES: Smooth, accurate, full and extensive

VISUAL FIELDS: OD is unremarkable OS no light perception

ANTERIOR SEGMENT
EVALUATION: OD OS
LID / LASHES OU: Clear
CONJUNCTIVA OU: +2 injection
OU: Pinguecula +.5
OU: Lymphangectasia (swelling of lymph vessels of bulbar conjunctiva).

SCLERA OU: Clear
CORNEA OU: Clear

ANT. CHAMBER

ANGLES	OU:	Grade 2		
AQUEOUS	OU:	No cells and/ or flare.		
IRIS	OU:	Blue and clear; no holes		
LENS	OD:	Clear	OS:	+4 cortical and nuclear cataract. pigment on anterior surface of lens.

ADDITIONAL TESTS: N/A

IOP: METHOD: GOLDMAN 20 mm. 23 mm.
Time: 3:05 PM

POSTERIOR SEGMENT:

POSTERIOR POLE				
	OD		OS	
OPTIC NERVE				
C/D:	OD:	.4/.4	OS:	No view
DEPTH:	OD:	3 D.	OS:	No view
MARGINS:	OD:	Clear and distinct		
HUE:	OD:	Orange	OS:	No view
MACULAR AREA:	OD:	Clear		
FLR:	OD:	+ 3	OS:	No view
VASCULAR:	OD:	2/3 A-V ratio, neg. hypertensive or arteriosclerotic changes		
PERIPHERAL RETINA:	OD:	Small Operculated Hole 9 o'clock, anterior to equator. Hole is surrounded by 1 DD. cuff of edema.		
	OD:	Lattice degeneration: 10 o'clock and 6 o'clock positions OD		

ADDITIONAL TESTS: OS: B scan showed long-standing rhegmatogonous Retinal detachment

VITREOUS: OD: Clear

Try to formulate diagnosis by history alone. After doing so, confirm your suspicions by viewing video tape.

Note: Correct diagnosis (the answer) is given 5 seconds following anterior segment presentation.

Diagnosis for Patient #9

1. Posterior synchiae with retinal detachment and severe cataract OS.
2. Retinal Hole in OD.

**************What are the Differential Dx's.*****************

DDx.

1. Trauma

**************** How would you treat this patient?****************

Plan:

1. Refer to Optholomoligist. OD: plan prophylactic laser treatment or laser and cryotheropy for retinal hole. OS: assess VA potential and patient consult.

2. Recommend safety lenses.

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