EYE MANIFESTATIONS OF LUPUS

RICARDO N. SEPULVEDA, MD
BOARD CERTIFIED OPHTHALMOLOGIST

CHARLES A. GARCIA & ASSOCIATES
HOUSTON, TX
LUPUS AND THE EYE

• Chronic, autoimmune, multisystem disease which may affect the eyes and/or visual system in up to 33%.

• Ocular manifestations of Systemic Lupus Erythematosous (SLE) may be a useful indicator of underlying systemic disease activity.

• Potentially blinding condition
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• Affects:
  – Eyelids
  – Lacrimal Gland
  – Conjunctiva/Sclera
  – Cornea
  – Lens (cataracts)
  – Retina
  – Optic Nerve
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PRESENTATION OF EYE DISEASE

• Ocular Pain
• Redness (Pink Eye)
• Blurry Vision
• Double Vision
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EYELIDS

• Rash

• Blepharitis (crusty eyelids)
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Tear Gland

• Dry eye syndrome is the most common ocular feature of SLE

• Often associated with secondary Sjögren's syndrome (autoimmune dry eye)

• Symptoms: Irritation, redness, sandy or gritty.

• Treatment: Over the counter artificial tears, Restasis, temporary plug in tear ducts.
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CORNEA

• Surface erosions and breaks
• Peripheral ulcerations
• Corneal Edema

• Treatment: Artificial tears, Restasis, Contact lens, Topical steroids.
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SCLERA/EPI SCLERA

• Anterior Scleritis/Episcleritis
  – May be presenting form, requires prompt attention
  – Red eye
  – Dull pain

• Posterior Scleritis
  – Blurry vision
  – Headache
  – Double Vision
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• SCLERITIS

Treatment:
• Anti-inflammatory drugs
  • Non-steroidal
  • Steroid

• Immunosuppressive drugs
  • Cyclophosphamide
  • Cyclosporine
  • Methotrexate
  • Mycophenalate
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RETINA (Lupus Retinopathy)
• Affected in 10% of SLE patients
• May be asymptomatic but more severe disease may cause loss of vision, field defects, distortion or floaters.
• Retinal signs often parallel the severity of systemic inflammation, and may indicate inadequate control of the systemic disease.
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Lupus Retinopathy

• **Acute Retinal Findings:**
  – Micro-infarctions (cotton-wool spots)
  – Retinal Hemorrhages
  – Tortuous Vessels

• **Chronic Retinal Findings**
  – New Vessel formation (neovascularization)
  – Retinal Detachments
  – Bleeding
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Treatment:

- Oral Steroids
- Immunosuppression Therapy
- Low dose Aspirin
- Laser Photocoagulation
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OPTIC NERVE

• Affected in 1% of patients with SLE

• Presents acutely with unilateral or bilateral loss of vision associated with or without pain that is worse with eye movements

• More than half will have a permanent visual defect and may progress to optic nerve atrophy
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OPTIC NERVE FINDINGS
- Swelling
- Bleeding
- Atrophy

TREATMENT
- Poor prognosis
- Oral steroids
- Immunosuppressive medications
- Blood Thinners
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EYE MUSCLES

• One series reporting a rate of 29.2% of SLE patients with ocular muscle disturbances.

• Symptoms and Signs
  – Double Vision
  – Eyes not straight (Lazy Eye)
  – Rapid Eye Movement (Nystagmus)
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OCULAR SIDE-EFFECTS OF MEDICATIONS

• Topical and Oral Steroids
  – Cataracts
  – Glaucoma

• Immunosuppressive Agents
  – Few side effects
  – High Cost

• Chloroquine/Hydroxychloroquine
  – Central Visual Loss
CONCLUSION

• Eye manifestations in SLE may be sight-threatening and can be an indicator of active systemic disease
• Significant ocular pain or vision loss are serious symptoms requiring urgent assessment by an ophthalmologist.
• The serious ocular manifestations of SLE generally require systemic immunosuppression.
• Early recognition by the rheumatologist, prompt assessment by the ophthalmologist and coordinated treatment strategies are key to reducing the ocular complications associated with this disease.
THANK YOU

E-MAIL: houstonlasik@gmail.com
Tel: 713-659-3937
Cel: 216-244-0423