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Potential Ocular Side Effects of Select Systemic Drugs

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Potential Ocular Side Effects of Select Systemic Drugs

Description

The purpose of this poster is to serve as a handy reference for current and future eye care providers. It summarizes the ocular side effects that are potentially seen in patients who are on select systemic medications.

Keywords

Ocular Side Effects; Systemic Drugs

Disciplines

Optometry

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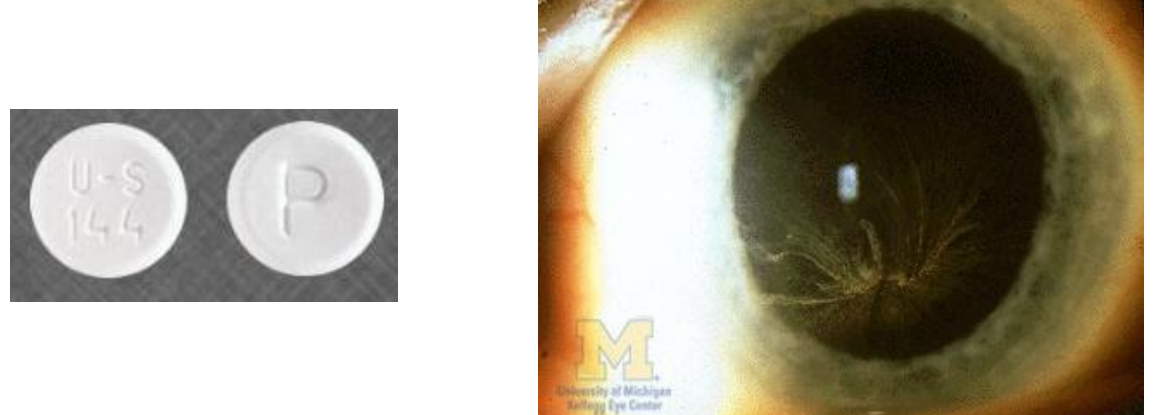
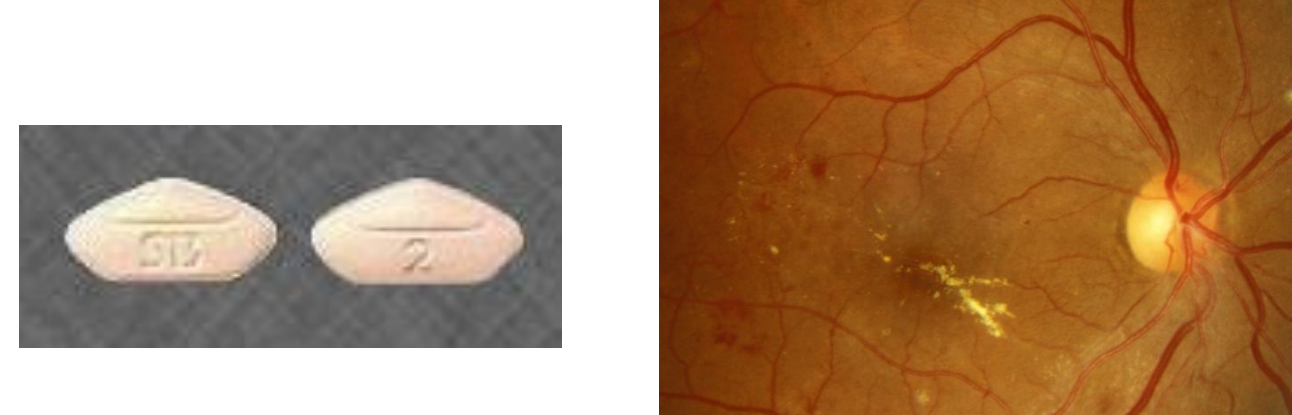



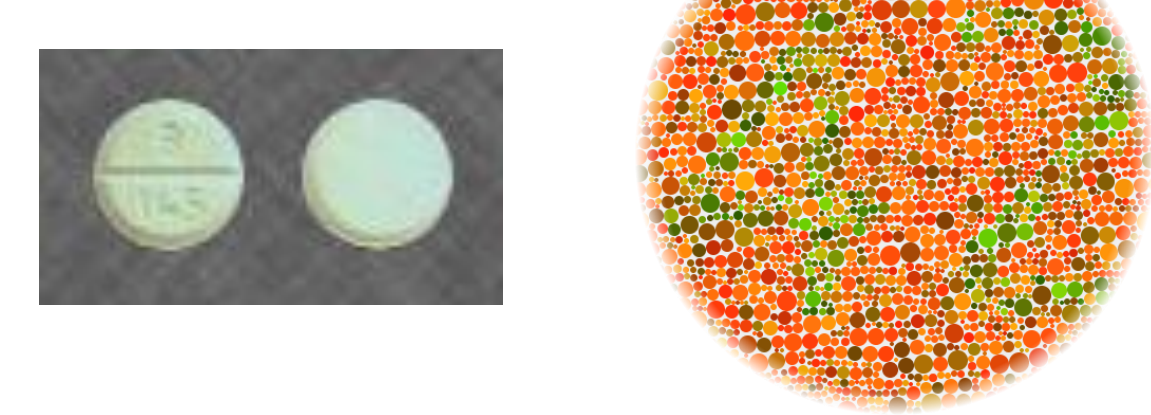
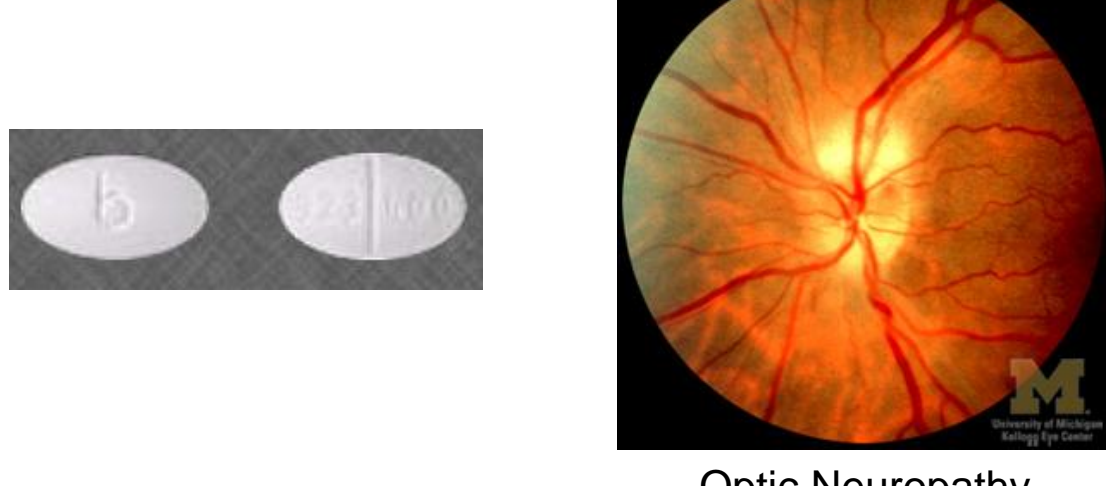

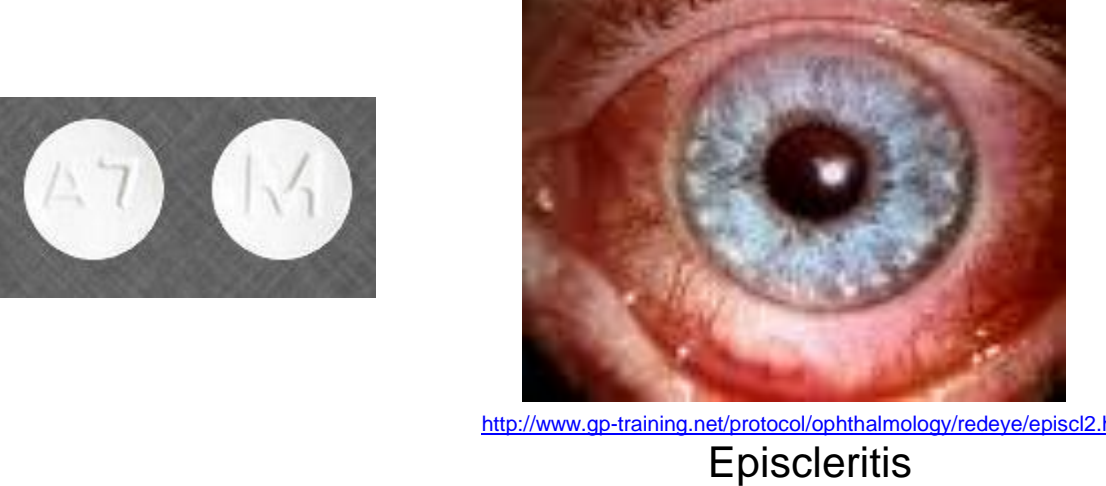
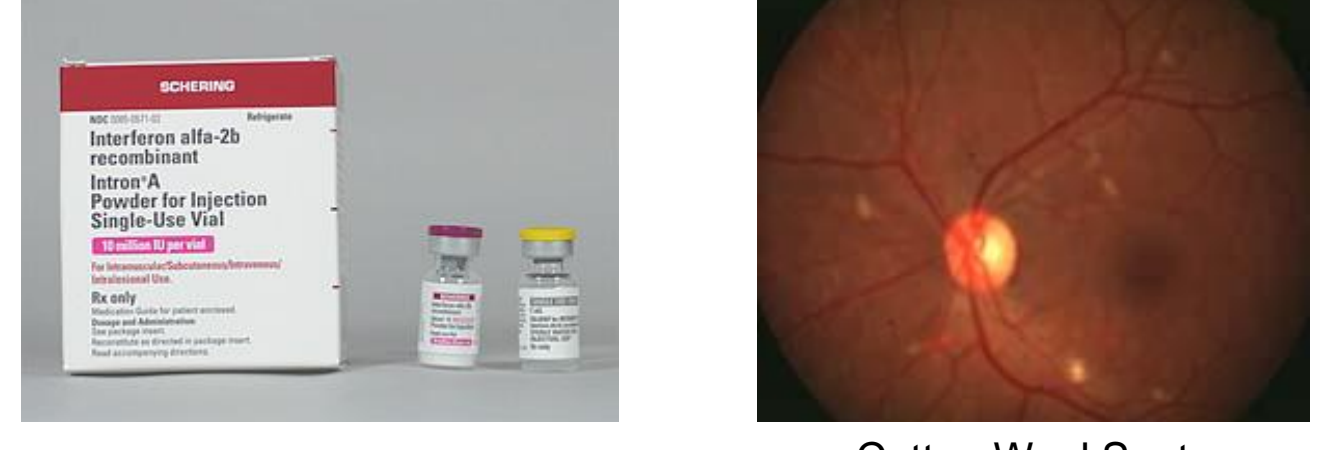
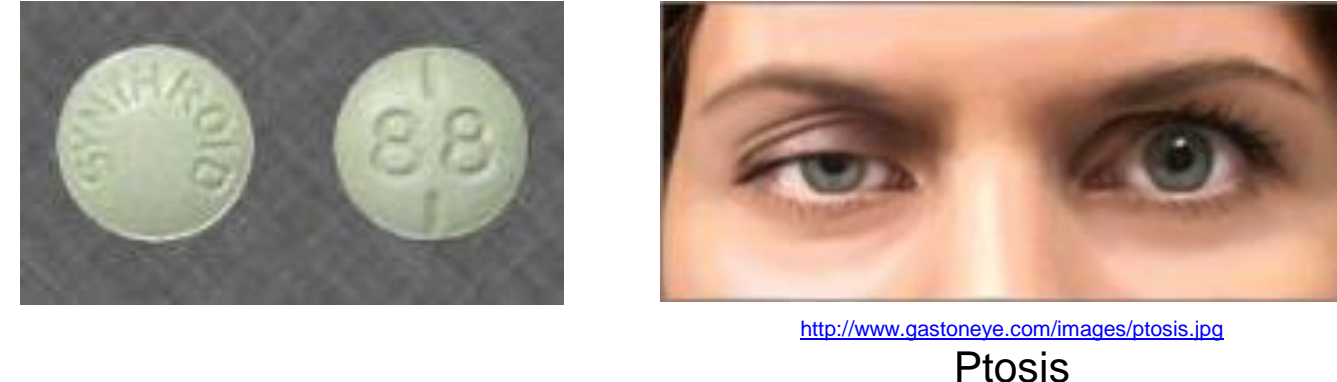


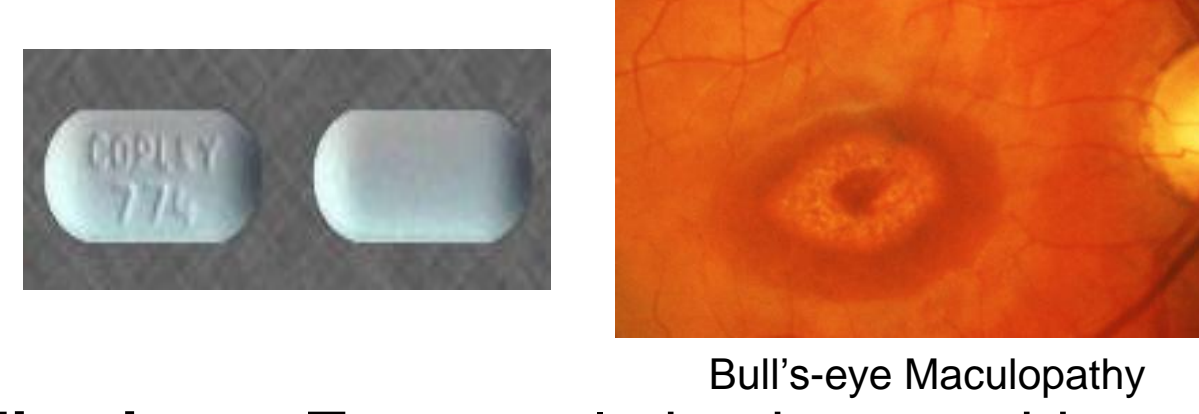

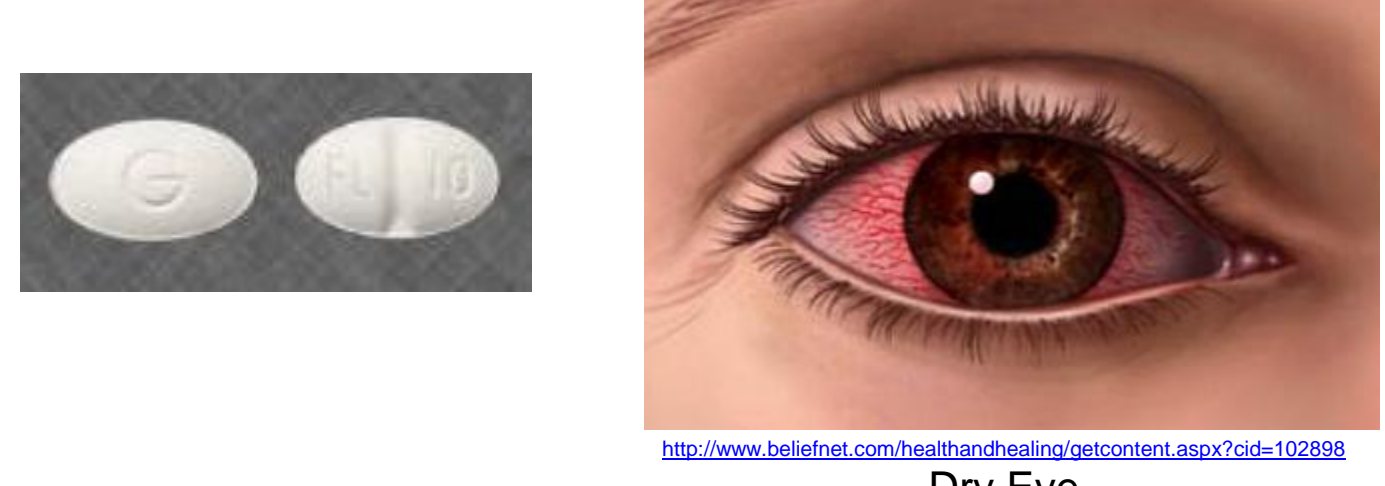



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Potential Ocular Side Effects of Select Systemic Drugs



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<p>Accutane (isotretinoin)</p>  <p>Indications: This retinoid (a form of vitamin A) is used to treat psoriasis, cystic acne, and various other skin conditions. Ocular Side Effects: Optic neuritis, dry eye, decreased night vision, and transitory myopia. Comments: Annual eye exam recommended.</p>	<p>amiodarone (Cordarone or Pacerone)</p>  <p>Indications: Antiarrhythmic Ocular Side Effects: Whorl keratopathy, optic neuropathy, and photophobia. Comments: Seen with 400-1,400 mg/d. DDX: Fabry's disease, indomethacin, chlorpromazine</p>	<p>Avandia/Actos (rosiglitazone maleate)</p>  <p>Indications: Diabetes. Increases sensitivity to insulin. Ocular Side Effects: Macular edema Comments: DDX from CSME; Cardiovascular events are also seen.</p>	<p>contraceptives estrogen and/or progesterone</p>  <p>Indications: Pregnancy prevention Ocular Side Effects: Optic neuritis, pseudotumor cerebri, dry eyes Comments: retinal thrombosis, cardiovascular events</p>	<p>Coumadin (warfarin sodium)</p>  <p>Indications: Prevents clot formation in atrial fibrillation and thrombosis. Ocular Side Effects: Retinal and subconjunctival hemorrhage. Also seen with ginkgo use. Comments: INR > 5 prone to bleed (normal 1-3)</p>
<p>crack cocaine/drug abuse</p>  <p>Indications: Illicit drugs Ocular Side Effects: Talc retinopathy, epithelial defects. Also seen with canthaxanthine. Comments: Talc are "fillers" in cocaine & abused drugs along with things like flour, laxatives, sugar, and local anesthetics among other precipitates.</p>	<p>digoxin (Digitek)</p>  <p>Indications: Congestive heart failure Ocular Side Effects: Red-green color defects, flickering or flashes of light, and colored spots. Snowy, hazy, or dimming vision. Yellow-tinged vision (xanthopsia) is also reported with this drug. Comments: Visual changes are reversible.</p>	<p>ethambutol (Myambutol)</p>  <p>Indications: Tuberculosis Ocular Side Effects: Optic neuropathy Comments: Monthly exam is suggested for doses >15mg/kg/day, elderly, children, and diabetics. Baseline exam should include VF, color vision, and optic nerve analysis.</p>	<p>Flomax (tamsulosin)</p>  <p>Indications: Benign prostate hypertrophy Ocular Side Effects: Loss of tone in iris dilator smooth muscle causing poor pupil dilation/prolapse <i>during cataract surgery</i>. Comments: Selective alpha-1A antagonist</p>	<p>Fosamax (alendronate/bisphosphonates)</p>  <p>Indications: Osteoporosis treatment/prevention Ocular Side Effects: Blurred vision, hyperemia, anterior uveitis, episcleritis, and scleritis. Comments: A thorough dilated exam is recommended due to the multiple side effects that may occur.</p>
<p>interferons (Intron A/Avonex/Pegasys)</p>  <p>Indications: Used to treat hepatitis & MS Ocular Side Effects: Ocular pain, conjunctivitis, cotton wool spots, optic neuritis, and pronounced dry eye. Comments: Eye exam prior to treatment and 2-4 weeks after treatments.</p>	<p>levothyroxine (Synthroid)</p>  <p>Indications: Replaces thyroxine not produced by thyroid Ocular Side Effects: Diplopia, ptosis, and paralysis of EOMs. Comments: Patient may experience symptoms similar to myasthenia with excess hormone.</p>	<p>Lipitor/Zocor (atorvastatin/simvastatin)</p>  <p>Indications: Hyperlipidemia Ocular Side Effects: Pseudo-cystoid macular edema Comments: Most commonly occurs in men between the ages of 30-50. Also seen with Niacin (vitamin to lower cholesterol).</p>	<p>phenothiazines (Thorazine, Mellaril)</p>  <p>Indications: Treats depression and anxiety. Ocular Side Effects: Night blindness (Nyctalopia), "brown vision", anterior subcapsular cataract, and salt/pepper fundus. Comments: Doses around 800 mg/d increase risk of toxicity.</p>	<p>Plaquenil (hydroxychloroquine)</p>  <p>Indications: Treats malaria, rheumatoid arthritis, and lupus erythematosus. Ocular Side Effects: Bull's-eye maculopathy, and corneal deposits. Comments: Baseline eye exam including HVF-10, Amsler grid, and color vision. Yearly thereafter.</p>
<p>prednisone (steroids)</p>  <p>Indications: Lupus, rheumatoid arthritis, and other immune-mediated conditions. Ocular Side Effects: Posterior subcapsular cataract; high IOP Comments: 25-80 mg/d; intravitreal injections and implants need regular monitoring.</p>	<p>Prozac/antidepressants (fluoxetine/SSRIs)</p>  <p>Indications: Antidepressant Ocular Side Effects: Dry eye, blurred vision, mydriasis, photophobia, diplopia, conjunctivitis, and ptosis. Comments: Commonly prescribed generic drugs in US.</p>	<p>tamoxifen citrate (Nolvadex)</p>  <p>Indications: Breast cancer Ocular Side Effects: Crystalline retinopathy Comments: Normal dosage levels (20 mg/d) are unlikely to induce retinopathy.</p>	<p>Topamax (topiramate)</p>  <p>Indications: Seizures. Also off label for migraine headaches. Ocular Side Effects: Acute myopia, bilateral angle closure glaucoma. Comments: Ultrasonography has also shown choroidal effusion, choroidal detachment, and ciliary body edema.</p>	<p>Viagra/Levitra/Cialis (sildenafil)</p>  <p>Indications: Erectile dysfunction Ocular Side Effects: Bluish tinge to vision (cyanopsia), NAION, and macular edema. Comments: Visual side effects occur in 11% of men taking 100-mg doses.</p>