

# Human Anatomy and Eye Diseases (1 hour)

**Lynn Eric Lawrence**

**Date:** 8/31/22

**Time:** 1 hours

**Domain:** Anatomy & Physiology

This course is designed to discuss the anatomical systems of the human body, and relate those systems to their perspective diseases. This knowledge is essential for training scribes. We will also discuss the common eye diseases associated with the different bodily systems.

## **Objectives**

- Complete review of systems anatomy
- Common Chronic Diseases associated with the eye
- How patient/family history aids are treatment

## **Outline:**

- Review of the systems of the body (10 min)
  - Integumentary
  - Skeletal
  - Muscular
  - Nervous
  - Psychiatric
  - Endocrine
  - Cardiology
  - Lymphatic
  - Respiratory
  - Digestive
  - Reproductive
- Common Chronic Diseases associated with the eye (35 min)
  - **Integumentary**
    1. Acne
    2. Basal Cell Carcinoma\*
    3. Herpes\*
    4. Dermatitis
    5. Dermatochalasis\*

6. Lupus\*
7. Melanoma Cancer
8. Rosacea\*
9. Shingles\*
10. Sarcoidosis\*

- **Skeletal System (bones support the body and organs)**

1. Spine
2. Neck pain\*
3. Back pain (Dowager's Hump- Kyphosis, Lordosis)
4. Arthritis\*
5. Rheumatoid Arthritis\*
6. Joint pain
7. Osteoporosis
8. Scoliosis
9. Bone disease

- **Muscular (produce movement)**

1. Cerebral Palsy (brain damage, loss of motor function)
2. Dermatomyositis (hips, thighs, shoulders, upper arms)
3. Muscular Dystrophy (loss of muscle mass/weakness)
4. Myasthenia Gravis (weakness, tire easily, any muscle)
5. Muscular Sclerosis\* (brain, spinal cord, CNS, Dx in oph)
6. Fibromyalgia (amplified pain sensation – usually post-trauma)
7. Fibrosis (MD, aging, and sever muscle injuries)

- **Nervous (Brain, sensory receptors, spinal cord, gland, ocular system)**

1. Retina 2<sup>nd</sup> Cranial Nerve
2. Cephalitis
3. Neuropathy
4. Epilepsy
5. Strokes\*
6. Headaches
7. Muscular Sclerosis
8. Hydrocephalus
9. Meningitis
1. Parkinson's
2. Seizures
3. Bell's Palsy
4. Dementia

5. Alzheimer's
6. Dyslexia

- **Psychiatric (issues of the mind)**

1. [Schizophrenia](#)
2. [Bipolar disorder](#)
3. [Anxiety disorder](#)
4. Stress disorders (tunnel vision)
5. [Major depressive disorder](#)
6. [Personality disorder](#)
7. ADD/ADHD
8. [Anorexia Nervosa\\*](#)
9. PTSD

- **Endocrine (hormones, regulate bodily processes)**

1. Diabetic retinopathy\*
2. Vessel damage
3. Thyroid eye disease\*
  - Proptosis\*
  - Grave's disease
  - Dry eyes
4. Tumors
5. Pituitary
6. Brain

- **Cardiology (transports blood through the body)**

1. Heart attack
2. High blood pressure\*
3. High cholesterol\*
4. Smoking
5. Anemia (Vitamin A/B-12 deficiency) \*
6. Arrhythmia – abnormal heartbeat
7. Coronary Artery Disease
8. Diabetes\*
9. Untreated sleep apnea/COPD\*
10. Genetics

- **Lymphatic/Immune system (protects/attacks foreign substances)**

1. Diabetes (Islet cells in pancreas)
2. RA Rheumatoid Arthritis (muscles)

3. Celiac Disease (gluten-intestines)
  4. Grave's disease (Thyroid-proptosis)
  5. Psoriasis (integumentary)
  6. Multiple Sclerosis (nervous system)
  7. Guillain Barre' Syndrome (nervous)
  8. Addison's disease (cortisol/stress)
  9. Anemia (circulatory/B-12 deficiency)
- **Respiratory (supplies blood with oxygen and removes CO2)**
    1. Adenoviruses
    2. Asthma
    3. Bronchitis
    4. COPD/Sleep Apnea\*
      - Emphysema (advanced version of COPD)
    5. Cystic Fibrosis (mucus- breathing/digestive)
    6. Histoplasmosis (airborne fungus from bird/bat droppings) \*
    7. Lung cancer
    8. Pneumonia (bacterial, fungal, viral, more)
    9. Tuberculosis (bacterial lung disease)
  - **Digestive (breaks down food and removes things not digested)**
    1. Hepatitis
    2. Gastritis
    3. Colitis
    4. Cirrhosis
    5. Ulcers
  - **Urinary (regulation of water/electrolytes and balances acid in the body)**
  - **Reproductive (production of babies)**
    1. Breast cancer\*
    2. Prostate
- **How Patient/Family History Helps in Treatment (5 min)**
    1. Genes matter
    2. Family member