

UNIT 5 - MUSCULAR SYSTEM

ACTIVITY - Muscle Diseases and Disorders

- A. When the connective tissue sheath of the tendon becomes inflamed and swollen following an injury or repeated stress of athletic activity. The most commonly affected are those of the shoulder, elbow, and hip.

The disorder is known as:

- B. Although muscle fibers and their associated connective tissues are flexible, they can be torn if overstretched. The seriousness of the injury depends on the degree of damage sustained by the tissues. In a mild condition, only a few muscle fibers are injured and the fascia remains intact. In a severe condition, many muscle fibers as well as the fascia are torn, and muscle function may be lost completely. Symptoms include pain, bruising, and swelling. In severe cases, surgery may be required to repair the damage.

The disorder is known as:

- C. This toxin can prevent the release of Ach from the motor nerve fibers at the neuromuscular junctions. When the muscle fibers fail to be stimulated, the body including the muscles responsible for breathing, may be paralyzed. Without prompt medical attention, death may result. This is a form of food poisoning that results when the bacteria have not been heated high enough to inactivate the toxin.

The disorder is known as:

- D. This occurs a few hours after death when the skeletal muscles undergo a partial contraction that causes the joints to become fixed. It seems to result from an increase in membrane permeability to calcium ions, which promote contraction and decrease in the availability of ATP, which prevents relaxation. The actin and the myosin filaments remain linked together until the muscles begin to decompose.

The **condition** is known as:

- E. When the muscles are forcefully exercised, they tend to enlarge.

The disorder is known as:

- F. A muscle that is not used undergoes a decrease in size and strength.
The disorder is known as:

- G. This is when the tendinous attachments of the hamstring muscles to the ischial tuberosity are sometimes torn as a result of strenuous running or kicking motions. The painful injury is accompanied by internal bleeding from damaged blood vessels that supply the muscles.
The disorder is known as:

- H. A soreness of the front lower leg due to straining of the flexor digitorum longus, often as a result of walking up and down hills or overbuilding the gastrocnemius. Tapping of the foot will help to increase the strength of the front of the lower leg and the symptoms of pain should disappear.
The disorder is known as:

- I. This is a group of genetic disorders characterized by muscle atrophy. The most common type is known as Duchenne or pseudohypertrophic and is characterized by progressive, rapid muscular weakness and atrophy. Death usually results by age 21. It is an X-linked inherited disease, affecting mostly males. The symptoms are usually seen by age three.
The disease is known as:

- J. This is an autoimmune muscle disease characterized by muscular weakness and chronic fatigue. The body is not capable of producing sufficient amounts of Ach as antibodies are sent to destroy it. The action potential cannot be sent to the skeletal muscles.
The disease is known as:

KEY – Muscle Diseases

1. *tendonitis*
2. *strain*
3. *botulism*
4. *rigor mortis*
5. *hypertrophy*
6. *atrophy or hypotrophy*
7. *torn hamstrings*
8. *shin splint*
9. *muscular dystrophy*
10. *myasthenia gravis*