Muscular dystrophy

Science, Epidemiology



This paper intends to define Muscular Dystrophy, enumerate some of the most common kinds, state its characteristics or symptoms, indicate the tests, treatment as well as its prognosis before finally reintroducing its complications and prevention.

Muscular Dystrophy Defined

"Muscular Dystrophy" is actually composed of thirty plus genetic diseases (National.., 2007). Otherwise known as "inherited myopathy", "Muscular Dystrophy" includes the following inherited sickness or medical conditions:

- 1. Becker's muscular dystrophy;
- 2. Duchenne muscular dystrophy;
- 3. Facioscapulohumeral muscular dystrophy;
- 4. Limb-girdle muscular dystrophy;
- 5. Emery-Dreifuss muscular dystrophy;
- 6. Myotonic Dystrophy;
- 7. Myotonia Congenita (Kantor, 2006).

Furthermore, Muscular Dystrophy's characteristics include the following: 1) feeling weak; 2) losing control of skeletal muscles; as well as 3) affecting all ages (National.., 2007).

Kinds of Muscular Dystrophy

The kinds of Muscular Dystrophy are the following:

• Duchenne Muscular Dystrophy

This kind occurs in approximately three out of three thousand five hundred boys (The.., 2007). It happens when the genes are unable to produce

dystrophin which is responsible for the strength of the muscles (The.., 2007). This kind emerges at the age of 5 and by 12, the patient is expected to use a wheelchair (The.., 2007). First, their pelvic muscles are affected, and following that, his or her shoulders, back, arms, as well as, legs will be the next (The.., 2007). With this kind of Muscular Dystrophy, a person will only live for approximately twenty years (The.., 2007).

Becker Muscular Dystrophy

This kind happens in one in every 30, 000 boys and just like the first kins, it is also due to the absence of dystrophin (The.., 2007). However, it is milder than the first and that patients suffering from it may live without a wheelchair (The.., 2007).

Myotonic Dystrophy

This is caused by a gene that should not be as large as it is (The.., 2007). It occurs before a person turns twenty years old (The.., 2007). Its major symptoms include the following: weakening & shrinking of the muscles (The.., 2007).

• Limb-Girdle Muscular Dystrophy

This kind emerges in both genders (Limb.., 2006). The muscles in the back, pelvis, as well as, shoulders are usually affected in this kind (Limb.., 2006).

Facioscapulohumeral Muscular Dystrophy

With this kind, weakening of the muscles begins in the face, then the shoulder and back come next, and finally, the muscles located in the legs and pelvis may lose strength (Muscular.., 2006).

Symptoms

For Muscular Dystrophy, the symptoms are the following:

First of all is the weakness of the muscles which actually gets worse gradually (Kantor, 2006). This is very much noticeable especially if the patient suffering from it experiences recurrent and numerous falls (Kantor, 2006). In addition to that, the patient may be confronted with interrupted development of what is technically referred to as muscular motor skills (Kantor, 2006). Moreover, if the patient is already delayed in walking or if he or she experiences problems with walking then it is highly possible that he or she suffers from Muscular Dystrophy (Kantor, 2006).

Furthermore, if the patient finds it difficult to utilize even just one of the muscle groups, then it is time to ask thedoctorto check on the patient to confirm the occurrence and emergence of Muscular Dystrophy (Kantor, 2006). Also, the patient who has Muscular Dystrophy will experience drooping of the eyelid (Kantor, 2006). Last but not least, the patient suffering from Muscular Dystrophy will exhibit drooling as well (Kantor, 2006).

Secondly, there are types of Muscular Dystrophy wherein a patient may signify mental retardation (Kantor, 2006).

Thirdly, Muscular Dystrophy patients also suffer from low muscle tone or that which is technically referred to as "hypotonia" (Kantor, 2006).

Fourthly, a patient who is diagnosed to have Muscular Dystrophy exhibits joint contractures like clubfoot, clawhand, etc (Kantor, 2006).

Last but not least, someone who has Muscular Dystrophy may also have a spine that's curved which means that he or she also has scoliosis (Kantor, 2006).

Tests

For Muscular Dystrophy to be diagnosed as a medical condition suffered from by the patient, there are several tests that could be carried out and some of these are the following:

First in the list is to have a physical examination including a look at the patient's medical history (Kantor, 2006).

The second one is to undergo muscle biopsy (Kantor, 2006). This will already confirm if the patient indeed suffers from Muscular Dystrophy (Kantor, 2006).

The third is to perform what is technically referred to as Serum CPK (Kantor, 2006).

The fourth is for the patient to be checked and tested through electromyography or EMG, for short (Kantor, 2006).

Last but not least is for the patient to go through ECG or electrocardiography (Kantor, 2006).

Other tests that the patient could go through to confirm Muscular Dystrophy include the following: 1) Aldolase; 2) AST; 3) Creatinine; 4) LDH; and 5) Myoglobin (Kantor, 2006).

Treatment

Unfortunately, experts have yet to discover ways on how to address this particular medical condition (Kantor, 2006). However, they presented techniques on how to manage the symptoms exhibited by the patients diagnosed to have Muscular Dystrophy (Kantor, 2006).

Some of these are the following:

First of all, physical therapy may be carried out to help sustain the strength of the muscles, as well as, in keeping the muscles functional (Kantor, 2006).

Second is the utilization of braces and wheelchairs (Kantor, 2006). This enables the patient to do some of the things on his or her own, for instance, moving around, etc (Kantor, 2006).

The third is for the patient to undergo spine or leg surgery (Kantor, 2006). This action may keep, if not improve the functions of the aforementioned parts of the body (Kantor, 2006).

Fourth, some doctors prescribe corticosteroids to children so as to keep them walking (Kantor, 2006).

Fifth, medical experts advise that patients suffering from Muscular Dystrophy should avoid complete inactivity since this will make the condition much worse (Kantor, 2006). They should try to move or be active as much as possible (Kantor, 2006).

Prognosis

Muscular Dystrophies worsen as time goes by -- and this goes for all kinds (Kantor, 2006). However, how severe it dwells on the kind of Muscular Dystrophy suffered from by the patient (Kantor, 2006). How fast it occurs also depends upon its kind and on the person suffering from it (Kantor, 2006). There are also some kinds of Muscular Dystrophy that have been proven as fatal (Kantor, 2006).

Complications

Muscular Dystrophy also has some complications and these are: 1) cardiomyopathy; decreased ability to take care of oneself; decreased mobility; failureof the respiratory system; joint contractures; mental disability; as well as, scoliosis (Kantor, 2006).

Prevention

Medical experts say that in cases where afamilymember from the previous generations had "Muscular Dystrophy", the members from the current generation should seek for what is technically referred to as "genetic counseling" (Kantor, 2006).

References

- 1. Kantor, D. (2006). Muscular Dystrophy. Retrieved May 6, 2007 from http://www. nlm. nih. gov/medlineplus/ency/article/001190. htm
- 2. Limb-Girdle Muscular Dystrophy. (2006). Retrieved May 6, 2007 from http://www.emedicine.com/PMR/topic65. htm
- 3. Muscular Dystrophy Association. (2006). Facioscapulohumeral Muscular Dystrophy.

- 4. Retrieved May 6, 2007 from http://www. mdausa. org/disease/fshd. html
- National Institute of Neurological Disorders and Stroke. (2007).
 Muscular Dystrophy.
- 6. Retrieved May 6, 2007 from http://www. ninds. nih. gov/disorders/md/md. htm
- 7. The Nemours Foundation. (2007). Muscular Dystrophy. Retrieved May 6, 2007 from http://www. kidshealth. org/parent/medical/bones/muscular_dystrophy. html