Atrial Myxoma
Cancer of the heart

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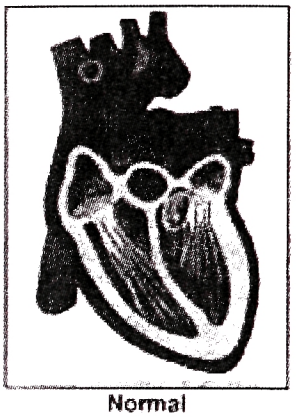
Normal

Cancer is one word that many humans fear. Millions of people are currently living with cancer or have had cancer previously in their lives, and millions more know people who have acquired cancer or unfortunately, have died from it. Regardless of the type of cancer one acquires, the result is the same: uncontrollable cell growth. Cancerous cells continuously grow and divide; instead of dying, they outlive normal cells to form abnormal cells (www.cancer.org). In some cases, cancerous cells may form tumors unlike other cancerous cells that circulate through the tissues where blood-forming organs are located.

One misconception about cancer is that any form of it is dangerous. Different cancers behave in different manners. Overall, there may be cases in which a tumor is non-cancerous and does not metastasize; this is known as a benign tumor. Benign tumors, with very few rare exceptions are also not life-threatening (Reynen, 1995). An example of a benign tumor may be cardiac myxomas, which are also referred to as primary tumors of the heart. Although this condition is rare, it can nonetheless be present in human beings and thereby cause a great deal of stress.

Cardiac myxomas are rare, usually noncancerous, primary tumors (new growth of tissue) of the heart. Of primary cardiac tumors that are benign, myxomas are common in adults. In children the most common type of cardiac tumors are known as rhabdomyomas. Myxoma is an intercardiac tumor; 75 percent of people who have myxomas have them develop in the left atrium of the heart, the latter twenty-five percent developing in the right atrium (Lohr, 1999). The condition of the myxoma does not usually take place in either of the ventricles; the chances of this occurring are merely three to four percent.

The macroscopic appearance of the myxoma takes on two basic shapes: one is a round, hard mass and the other, an irregular shaped, soft mass. They are attached to the inner lining of the heart, the endocardium. The actual movement of the tumor varies with the amount of collagen and the extent of the attachment of the tumor to the endocardium (Reynen, 1995). Myxomas appear white, gray-white, yellow or brownish and they may also contain calcium. The tumors range from one to fifteen centimeters in length with most being five to six centimeters. The weight of the tumor ranges from twenty to one-hundred and twelve grams. Cells that make up the tumor are spindle-shaped and embedded in a matrix of carbohydrates. The tumor gets its blood supply through capillaries that bring in blood to the heart. Thrombi, "a clot formed in the blood vessel or chamber of the heart" (Dictionary.com) may be attached to the outside of the myxoma.

The major syndromes of myxoma may be one of the following: embolic events, obstruction of blood flow, and constitutional syndromes. Embolic events often occur when fragments of the tumor are released and enter the blood stream. Irregular shaped tumors that are soft in mass are more likely to embolize than the firm form of the tumor.

More so, the obstruction of blood flow in the heart occurs in the heart valves where the mitral valve is one that is mainly affected. Blood flow restrictions commonly lead to pulmonary congestion and heart valve disease. Embolization leads to different consequences such as entrance in the brain, kidneys and other extremities, which can then cause pulmonary congestion or heart valve disease. The third syndrome caused by a myxoma is comprised of constitutional syndromes and has non-specified symptoms.

Myxoma has no causative agent and the main symptoms in its detection are very generic; many include fever, weight loss, anemia, high white blood cell count, and a decrease in platelet count (Reynen, 1995). Most patients who acquire myxoma are between the ages of thirty and sixty. Myxomas usually occur sporadically, but familial myxomas have been noted, where patients are considerably younger than those with non-familial myxomas. The differential diagnosis of myxoma encompasses benign and malignant tumors. Metastatic tumors to the heart are twenty to forty times more common than primary tumors (Reynen, 1995). If there is suspicion of having a myxoma, this can be confirmed through an endocardiogram.

In order to treat a person from myxoma, the best thing to do is to surgically remove the tumor. The tumor is unlikely to grow back; it will only do so if a piece of it has been left behind in the surgery. In most cases the surgery is promptly performed, so the possibility of embolic complications does not usually lead to death. However, myxomas can be removed easily because they are pedunculated (Lohr, 1999). The short- and long-term prognosis is excellent in that the rate of mortality from the operation is as little as zero to three per cent. There are only few cases in which the patient may require cardiac pacing due to disturbances of the atrioventrical conduction.

There are few cases in which myxoma reoccurs; tumors have been detected mainly four years after the surgery has been performed. The chances for reoccurrence of the tumor are only one to three per cent. The explanations for this phenomenon have been incomplete tumor removal and embolization, but endocardiographic examinations allow the person to detect if she/he has regained the tumor.

So although cardiac tumors are mainly benign, they can be lethal due to their positioning. The positioning of the tumor mimics cardiac disease and moreover immunologic, malignant and infective processes. Symptoms depend on size, mobility and location of the tumor.

Although the occurrence of myxoma is rare, it still should be taken seriously, and if symptoms are detected, an endocardiograph test should be administered. In today's day and age, there are many factors that may lead to the occurrence of cancer, but none of these factors can be labeled as distinct cancerous agents. Therefore, since researchers have no common cause for cancer, no cure can be formed either. If a human being does have cancer, the faster it is found and treated, the greater the chances are of him/her living a happy and healthy life. ■