

## CHORDOMA TUMOR TREATMENT

### M Bastani Pur Moghaddam

Bahonar School, Iran

Chordoma is a cancer that grows in the spine and is very rare. Only one in every one million people suffers from it. Chordoma can be formed anywhere from the waist and neck and usually grow slowly. Since these tumors are close to important areas such as the brain and the ducts, they should be treated with great care.

**Types of Chordoma:** Are there different types of chordoma? There are four subtypes of chordoma, which are classified based on how they look under a microscope: Ordinary (or classical) Chordoma is the most common form of Chordoma. This is a unique cell type; poorly differentiated chordoma is a recently identified subtype. It can be more aggressive and faster growing than conventional chordoma, and is more common in pediatric and young adult patients, as well as in skull base and cervical patients. Pathologists can diagnose poorly differentiated chordoma by testing a tumor sample for deletion of a gene called INI-1. All poorly differentiated chordomas have loss of the INI-1 gene; Dedifferentiated chordoma is more aggressive and generally grows faster than the other types of chordoma, and is more likely to metastasize than conventional chordoma. It can also have loss of the INI-1 gene, but this is not common. This type of chordoma is rare, occurring in only about 5 percent of patients, and is more common in pediatric patients; Chondroid chordoma is a term more commonly used in the past when it was difficult to distinguish conventional chordoma from chondrosarcoma. This is no longer a problem because brachyury is expressed in nearly all conventional chordomas, making them easier to distinguish from cartilaginous tumors like chondrosarcoma that do not express brachyury. There is no evidence that chordomas with a chondroid appearance behave differently than conventional types that do not have this appearance.

**If the chordoma spreads to other parts of the body:** The most common places that spread to them are lungs, liver, bones, or lymph nodes. What causes chordoma? Chordoma tumors develop from cells of a tissue called the notochord, which is a structure in an embryo that helps in the development of the spine. The notochord disappears when the fetus is about 8 weeks old, but some notochord cells remain behind in the bones of the spine and skull base. Very rarely, these cells turn into cancer called chordoma. What causes notochord cells to become cancerous in some people is still not fully known. The vast majority of chordomas occur at random and not as a direct result of an inherited genetic trait; however, there are several genetic factors associated with chordoma. For example, more than 95 percent of individuals with chordoma have a single-letter variation, called a SNP ("snip"), in the DNA sequence of a gene called brachyury. This SNP causes an increase in the risk of developing chordoma.

**Today, the disease has three therapies:** Radiotherapy; Chemotherapy and Chordoma surgery.

Tumor symptoms at the base of the skull: Severe headaches; Pain in the face; Visual disturbances, such as drowsiness, difficulty concentrating your eyes or eye movements; Paralysis of the facial nerves that affects the swallowing, speech and movement of the eye, nausea and tiredness.

**Tumor symptoms in the main spine:** the pain; swelling; there is a tumor in the neck; respiratory obstruction; neck pain; hoarseness; problem in swallowing.

**General signs:** the pain; weakness; lack of sense.

### Biography

Mahdi Bastani pur moghaddam The student is 16 years old. Since 2 years ago, he began to study the relationship between nail building and osteoporosis. Interested in research: Prevention and treatment of osteoporosis.

Mahdi.pur.moghaddam@gmail.com