7/19/2014
Dear Helena,
It was so nice to meet you! Thank you so much for your and Dennis's time at your beautiful farm. We truly enjoyed our visit!

In looking at the information on **Osteochondritis Dissecans,** there are some health habits that would be important to discuss.

If Aaron is serious about healing his body, the following eating habits must be considered: eliminate all soda pop, white sugar, cow's milk and white flour while rebuilding. His is a condition of deterioration and being it is a bone, cartilage, and inflammation issue, what I would suggest would be the following supplements:

The **Alfalfa** – is an excellent for reducing inflammation and healing the body (have *Alfalfa* file attached)
Joint Health Complex – helps strengthen and build up the cartilage and is fantastic for pain.
Protein – cell builder, body cleanser, etc. Dr. Bruce Miller who was a research doctor, stated that Calcium and Protein are the biggest deficiencies in the American Diet.
Osteomatrix- will actually help build up bone matrix. (attached is the clinical study on it)

Being it has to do with "lack of blood circulation" around that area, I would recommend more **Vita-E** which helps increase blood flow through the body.

Just a few questions:
Does he drink soda pop?
How are his bowel movements? Your colon is a source of absorption, thus if he is not eliminating 2-3 times a day (like a healthy baby ☺) then that is the 1st place to start with healing.
What does he get for Calcium?

Helena, he is young and the younger the faster healing. If you did surgery, what will happen 10 years from now? The key is to heal the body naturally and then he should be able to live a normal, healthy life without the restrictions of an inside health issue!

Attached are the following files:
Why supplements/ Why Shaklee – goes through the society and food in general is depleted of key nutrients and that is why bodies are "falling apart"
Shaklee Brag file – is a very interesting file on Shaklee's background and research which is amazing
Alfalfa – it is a long file but the 1st 3 pages are the most important
Osteomatrix Shows the clinical research

We will talk soon.
Sincerely,
Heidi Carlstedt

Osteochondritis Dissecans

Osteochondritis dissecans (OCD) is a condition that develops in joints, most often in children and adolescents. It occurs when a small segment of bone begins to separate from its surrounding region due to a lack of blood supply. As a result, the small piece of bone and the cartilage covering it begin to crack and loosen.

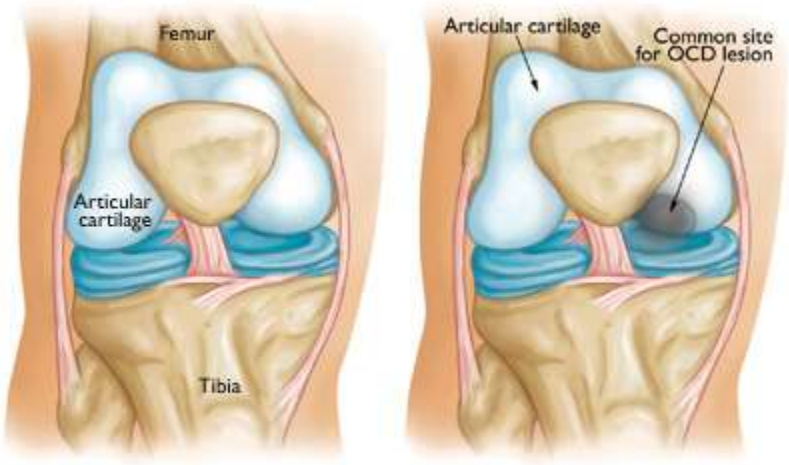
The most common joints affected by osteochondritis dissecans are the knee, ankle and elbow, although it can also occur in other joints. The condition typically affects just one joint, however, some children can develop OCD in several joints.

In many cases of OCD in children, the affected bone and cartilage heal on their own, especially if a child is still growing. In grown children and young adults, OCD can have more severe effects. The OCD lesions have a greater chance of separating from the surrounding bone and cartilage, and can even detach and float around inside the joint. In these cases, surgery may be necessary.

Anatomy

A joint is where the ends of bones meet, such as your knee, ankle, or shoulder joint. Healthy joints move easily because of a smooth, slippery tissue called articular cartilage. Cartilage covers and protects the ends of your bones where they meet to form a joint.

The most common location of OCD is in the knee at the end of the femur (thighbone).



(Left) The knee joint is formed where the femur meets the tibia. **(Right)** The most common site for OCD of the knee.

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Cause

It is not known exactly what causes the disruption to the blood supply and the resulting OCD. Doctors think it probably involves repetitive trauma or stresses to the bone over time.

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Symptoms

Pain and swelling of a joint — often brought on by sports or physical activity — are the most common initial symptoms of OCD. Advanced cases of OCD may cause joint catching or locking.

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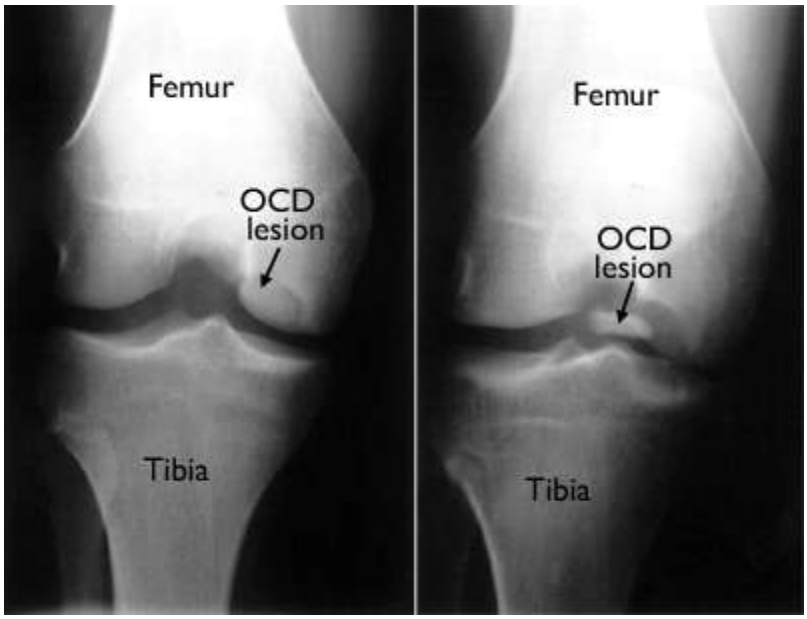
Doctor Examination

After discussing your child's symptoms and medical history, your doctor will perform a physical examination of the affected joint.

Other tests which may help your doctor confirm a diagnosis include:

X-rays. These imaging tests provide detailed pictures of dense structures, like bone. An x-ray of the affected joint is essential for an initial OCD diagnosis, and to evaluate the size and location of the OCD lesion.

Magnetic resonance imaging (MRI) and ultrasound. These studies can create better images of soft tissues like cartilage. An MRI can help your doctor evaluate the extent to which the overlying cartilage is affected.



These x-rays show OCD of the knee in a skeletally mature adolescent. **(Left)** An OCD lesion at the end of the femur. **(Right)** The lesion has detached from the femur and is floating within the knee joint.

Reproduced with permission from Crawford DC, Safran MR: Osteochondritis dissecans of the knee. J Am Acad Orthop Surg 2006; 14: 90-100.

This MRI scan shows an OCD lesion in the femur of an 18-year-old patient.

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Treatment

Observation and Activity Changes

In most cases, OCD lesions in children and young teens will heal on their own, especially when the body still has a great deal of growing to do. Resting and avoiding vigorous sports until symptoms resolve will often relieve pain and swelling.

Nonsurgical Treatment

If symptoms do not subside after a reasonable amount of time, your doctor may recommend the use of crutches, or splinting or casting the affected arm, leg or other joint for a short period of time.

In general, most children start to feel better over a 2- to 4-month course of rest and nonsurgical treatment. They usually return to all activities as symptoms improve.

Surgical Treatment

Your doctor may recommend surgery if:

- Nonsurgical treatment fails to relieve pain and swelling
- The lesion is separated or detached from the surrounding bone and cartilage, moving around within the joint
- The lesion is very large (greater than 1 centimeter in diameter), especially in older teens

In this x-ray of the knee, an OCD lesion has been fixed in place with two screws.

Reproduced with permission from Crawford DC, Safran MR: Osteochondritis dissecans of the knee. J Am Acad Orthop Surg 2006; 14: 90-100.

There are different surgical techniques for treating OCD, depending upon the individual case.

- Drilling into the lesion to create pathways for new blood vessels to nourish the affected area. This will encourage healing of the surrounding bone.
- Holding the lesion in place with internal fixation (such as pins and screws).
- Replacing the damaged area with a new piece of bone and cartilage (called a graft). This can help regenerate healthy bone and cartilage in the area damaged by OCD.

In general, crutches are required for about 6 weeks after surgical treatment, followed by a 2- to 4-month course of physical therapy to regain strength and motion in the affected joint.

A gradual return to sports may be possible after about 4 to 5 months.

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Last reviewed: March 2012

Reviewed by members of the Pediatric Orthopaedic Society of North America

http://orthoinfo.aaos.org/topic.cfm?topic=A00610

Definition

By Mayo Clinic Staff

Osteochondritis dissecans (os-tee-o-kon-DRY-tis DIS-uh-kanz) is a joint condition in which a piece of cartilage, along with a thin layer of the bone beneath it, comes loose from the end of a bone.

Osteochondritis dissecans occurs most often in young men, particularly after an injury to a joint. Osteochondritis dissecans is most common in the knee. But, osteochondritis dissecans can occur in other joints.

If the loosened piece of cartilage and bone stays close to where it detached, you may have few or no symptoms of osteochondritis dissecans, and the fracture may heal by itself. Surgical repair may be necessary if the fragment comes loose and gets caught between the moving parts of your joint, or if you have persistent pain.

Causes

By Mayo Clinic Staff

The exact cause of osteochondritis dissecans is unknown. It may be caused by a reduction of blood flow to the end of the affected bone. This may occur from repetitive trauma — small, multiple episodes of minor unrecognized injury that damage the end of the affected bone. There may also be a genetic component involved, making some people more inclined to develop the disorder.

Risk factors

By Mayo Clinic Staff

- **Age.** Osteochondritis dissecans occurs most often in people between the ages of 10 and 20, with the average age around 11.
- **Sex.** Males are more likely to develop osteochondritis dissecans than are females.

- **Sports participation.** Sports that involve jumping, throwing and rapid changes in direction may increase your risk of osteochondritis dissecans.

Complications

By Mayo Clinic Staff

Osteochondritis dissecans can increase your risk of eventually developing osteoarthritis in that joint.

http://www.mayoclinic.org/diseases-conditions/osteochondritis-dissecans/basics/definition/con-20024803

Osteochondritis dissecans facts

- Osteochondritis dissecans is a joint condition whereby a variable amount of bone and its adjacent cartilage loses its blood supply.
- The cause of osteochondritis dissecans is often unknown.
- Symptoms include joint pain, stiffness, and even locking of the joint.
- Osteochondritis dissecans is best diagnosed with imaging studies.
- Arthroscopic surgery is a procedure that is frequently used as a treatment to remove the loose cartilage and bone tissue from the joint.

What is osteochondritis dissecans?

Osteochondritis dissecans is a joint condition whereby a variable amount of bone and its adjacent cartilage loses its blood supply. Osteochondritis dissecans can involve the bone and cartilage of virtually any joint. Elbows and knees are most commonly affected. Usually, only a small portion of the affected cartilage is involved. Osteochondritis dissecans most commonly affects boys between 9 and 18 years of age.

What causes osteochondritis dissecans?

The cause of osteochondritis dissecans is often unknown. Theories include mild recurrent injuries or growth disturbances.

What are symptoms of osteochondritis dissecans?

Symptoms of osteochondritis dissecans are a direct result of the irregularity of the cartilage within the affected joint. Symptoms include joint pain, stiffness, and even locking of the joint so that its range of motion is significantly limited to the point that it cannot be moved beyond a limited range. For example, when osteochondritis dissecans affects the elbow, the joint may not move beyond 90 degrees of extension instead of being able to fully extend straight to 180 degrees.

How is osteochondritis dissecans diagnosed?

Osteochondritis dissecans can be suggested clinically by observing the lack of full range of motion with "locking" of the joint at a certain angle. It is at this angle that the loosened cartilage and bone is literally being "pinched" as the joint is attempting to move. Ultimately, osteochondritis dissecans is

best diagnosed with imaging studies, such as magnetic resonance imaging scan (MRI scan) or an arthrogram.

What is the treatment of osteochondritis dissecans?

There is no cure as such, but the condition can be treated by a variety of means depending on the size and location of the lesion as well as the age of the patient and the degree of symptoms. Arthroscopic surgery is a procedure that is frequently used as a treatment to remove the loose cartilage and bone tissue from the joint.

Sometimes, especially in the very young (juvenile) form, osteochondritis dissecans can spontaneously correct itself.

What is the prognosis of osteochondritis dissecans?

Indicators of a worse prognosis or outcome include a large-sized lesion, a lesion on a weight-bearing area, and older age of the patient.

Can osteochondritis dissecans be prevented?

It is only possible to prevent osteochondritis dissecans by preventing trauma or injury to the affected joint.

Medically reviewed by Margaret Walsh, MD; American Board of Pediatrics

REFERENCE:

Humes, H. David, et al., eds. *Kelley's Textbook of Internal Medicine*. 4th Edition. Philadelphia: Lippincott Williams & Wilkins, 2000.

Medically Reviewed by a Doctor on 4/29/2014

http://www.medicinenet.com/osteochondritis_dissecans/index.htm