What treatment options are available for OCD?

Stable OCD in children with growth remaining in their knee (roughly, boys below age 16 and girls below age 14) who still have active or 'open' growth plates **can ideally be treated without surgery.** Resting from impact activities (like running and jumping) is recommended for at least 3 months. Many physicians will also recommend crutches, bracing, and or casting. In these scenarios, the hope is that the bone will heal itself, and 50-60% of the time, complete healing will occur with this treatment. However, if the patient is older, and is no longer growing, or if an OCD does not heal in a child treated with activity modifications, or if it is "unstable" or threatening to break off when it is first discovered, surgery may be required.

What is "activity modification"?

If your doctor has recommended that you or your child modify activity, all activities that involve running or jumping should be avoided. These include activities and sports like soccer, basketball, lacrosse, baseball, tennis, volleyball, softball, racket sports, gymnastics, and dance. Safer alternatives that your doctor may allow include swimming, biking, and yoga.

What kind of surgery is available to treat OCD?

The surgical choices to treat OCD depend on whether the OCD is firmly in place (stable) or threatening to loosen or dislodge (unstable). The following are a few examples of the many surgeries that are currently available to treat OCD.

Surgery for Stable OCD

If the OCD is stable, the **goal of the surgery is to help the OCD heal.** This is most often done arthroscopically, with small incisions assisted by camera and small tools. A small pin is used to make drill holes to help encourage blood to flow to the area to heal the bone and cartilage.

Surgery for Unstable OCD

If the OCD is unstable, **the point of the surgery is to make it firm or stable.** A screw or dart may be used to hold the OCD in place to help it heal. Sometimes bone might be harvested from a different site through a small incision to help replace the bone beneath the OCD. Fixation may sometimes be done at the same time as the small pin drilling, as mentioned above.

If the bone and cartilage have broken off, and cannot be fixed, the **goal of surgery is to place new cartilage in the defect, or the place on the joint from which the cartilage broke off**.

- This can be done by 'microfracture', or stimulation of the bone, to make new scar tissue that acts like cartilage. This can be performed with or without additional biologic tissue.
- Cartilage and bone may be moved from an area of the knee that is less weight bearing, this is called osteochondral autograft transfer, or 'OAT'.
- Cartilage and bone from a cadaver ("Osteochondral allograft transplantation") may alternatively be used to fill the defect.
- Lastly, the patient's own cartilage may be sent to a lab and used to grow new cartilage that may be put back into the patient a few months later. This was traditionally called autologous chondrocyte implantation, 'ACI' and now more recently has evolved to include a scaffold membrane for the new cartilage cells and is now referred to as 'MACI'. This technique does require a second surgery.

Can OCD's come back?

Once an OCD is healed, we do not believe that they can "come back." However, sometimes an OCD acts like it has healed, or looks like it has healed, when in fact it has not. Or a new OCD can rarely present in the same knee. In these cases, there may be a misconception that the OCD has "come back."