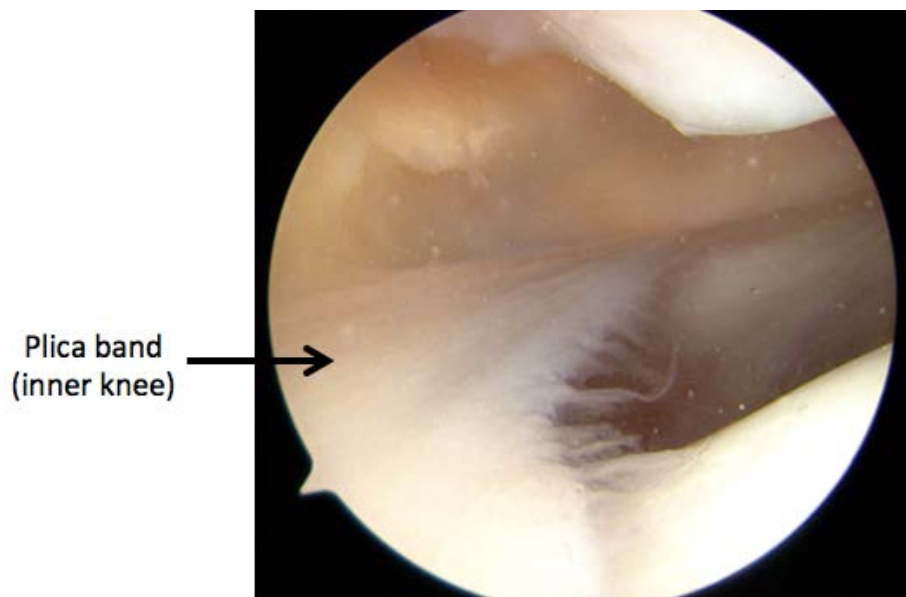


## **Plica Syndrome**

### **Description**

- The plica is a fold of joint lining that is a remnant of tissue from development. During development, bands of tissue divide the limbs into joints. These bands may persist into adulthood in up to 60% of people. This band of tissue infrequently causes symptoms
- Several different band types may exist. These bands may become thickened and inflamed, causing varying symptoms often at the inner aspect of the knee



### **Causes**

- Trauma to the knee, either direct or with repetitive knee motion, causes thickening of the plica, and it loses its elasticity and becomes stiff
- As a result, the plica pinches on the inner knee joint and inner patella
- The pain is felt to be due to pinching or pulling of the plica
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### **Risk Factors**

- Sports that require repeated, forceful bending / straightening of the knee (such as kicking and jumping as in soccer or basketball)
- Repeated injuries to the knee
- Sports in which the knee may receive direct injury (volleyball, hockey, football) or that require prolonged kneeling

### **Signs and Symptoms**

- Pain in the front of the knee, especially on the inside of the knee, worse with kneeling, squatting, sitting for long periods, arising from a sitting position, or walking or running up or down stairs or hills
- Catching, locking, and clicking of the knee
- Pain and tenderness under the kneecap (patella) especially inner aspect

### **Diagnosis**

- The diagnosis of plica syndrome can be made by history and physical exam
- Magnetic Resonance Imaging (MRI) has limited value in detecting a normal or abnormal plica because it is difficult to see and many people have a plica that is asymptomatic
- X-rays of the knee are an important part of the work-up to rule out other injury or conditions that can affect the bones of the knee

### **Prevention**

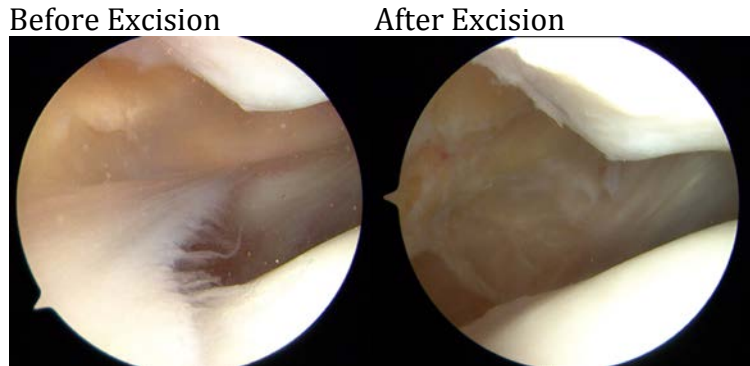
- Proper padding can reduce direct injury to the knee and the plica region
- Allow complete recovery before returning to sports

### **Treatment**

- Initial treatment consists of ice, limb elevation, and medications to improve pain and swelling
  - Ice should be applied for 20 minutes at a time, every 2 to 3 hours. Heat may be beneficial before stretching and strengthening activities
  - Non-steroidal anti-inflammatory pain medications, such as naproxen or ibuprofen may be used and should be taken according to your physician
  - Elevation of the affected knee above the level of the heart will reduce swelling
- Range-of-motion, stretching, and strengthening exercises may be carried out at home, although referral to a physical therapist may be recommended
- Occasionally an injection of cortisone can be used to reduce the inflammation of the plica
- Surgery is not usually necessary; it is usually reserved when symptoms persist despite conservative treatment

### **Surgery**

- Surgery to remove the plica is usually performed arthroscopically on an outpatient basis (you go home the same day)



### **Postoperative Care**

- Keep the wound clean and dry during the initial postoperative period
- Elevate the foot and ankle above the level of the heart as much as possible for the first 1 to 2 weeks after surgery
- Using ice and pain medications will help decrease pain and swelling
- The patient may put as much weight on the operated leg as possible, although crutches are often used after surgery until walking without a limp can be achieved
- Postoperative rehabilitation and exercises are very important to regain motion and strength

### **Return to Sports**

- Return to sports depends on the type of sport and the position played
- Full knee motion and strength are necessary before sports can be resumed
- Return to sport following a plica excision is usually at 6-12 weeks following surgery

### **Notify the Office If:**

- The patient experiences severe pain, numbness, a loss of color, or coldness of the affected leg
- If signs of infection develop such as fever, increased pain, severe swelling, redness, drainage, or bleeding at the surgical site
- If new, unexplained symptoms occur