

Plica Syndrome



What is Plica Syndrome?

The knee has **folds of tissue called synovial plicae**, which are normal structures inside the joint.

Plica syndrome occurs when one of these folds becomes **irritated or inflamed**, usually from **overuse, trauma, or repetitive knee bending**.

- Commonly affects **adolescents and young adults**
- Often occurs in **active children involved in running, jumping, or sports requiring frequent knee bending**

Symptoms

Children may experience:

- Pain along the **inside or front of the knee**
- A **clicking, snapping, or popping** sensation during knee movement
- Stiffness, especially after sitting or activity
- Swelling or mild tenderness over the affected area
- Occasional **knee locking or giving way** (rare)

Symptoms often worsen with:

- Running or sprinting
- Jumping
- Squatting
- Climbing stairs

Causes

- Repetitive **knee bending or twisting**
- Direct **impact to the knee**
- Overuse from sports or activity
- Tight thigh muscles (quadriceps) or weak supporting muscles
- Previous knee injury

Diagnosis

- Usually made by **clinical assessment**: history, physical examination, and specific knee tests
- **Imaging** (ultrasound or MRI) may be used to rule out other knee problems
- Important to distinguish from **patellar tendonitis, meniscal tears, or ligament injuries**

Treatment

1. Activity Modification

- Reduce or avoid activities that worsen symptoms

- Low-impact exercise may continue if pain-free

2. Pain Relief

- **Ice: 10–15 minutes after activity**, 2–3 times daily
- Painkillers such as paracetamol or ibuprofen (as advised)

3. Physiotherapy

- Stretch tight quadriceps, hamstrings, and calves
- Strengthen **hip, thigh, and core muscles**
- Improve knee tracking and movement patterns
- Gradual return to sport as pain allows

4. Other Measures

- Knee braces or taping may help in some cases
- Surgery is **rarely needed** and only considered if symptoms persist after conservative treatment

Prevention & Care

- Warm up before sports or physical activity
- Maintain flexibility in thigh and calf muscles
- Strengthen hip, thigh, and core muscles regularly
- Avoid sudden increases in training intensity or repetitive knee strain

Prognosis

- Most children recover fully with rest, physiotherapy, and gradual return to activity
- Symptoms usually resolve over **weeks to months**
- Surgery is rarely required

When to Seek Medical Advice

Seek review if:

- Knee pain persists despite rest and exercises

- Clicking, locking, or giving way becomes frequent
- Pain affects daily activities or sports participation
- Swelling, redness, or fever occurs