

PATIENT INFORMATION LEAFLET

Pre-patellar bursitis



Pre-patellar bursitis

A bursa is a small sac of fluid that acts to reduce friction and cushions pressure points between your skin, tendons, muscles or bones near a joint. An adult body contains over 140 bursas. Bursitis is the term used to describe inflammation within a bursa. Within and around your knee, there are several bursas – pre-patellar bursa, infra-patellar bursa, supra-patellar bursa and pes anserine bursa (also known as your subsartorial bursa). The most commonly affected is your pre-patellar (in front of your kneecap) bursa.

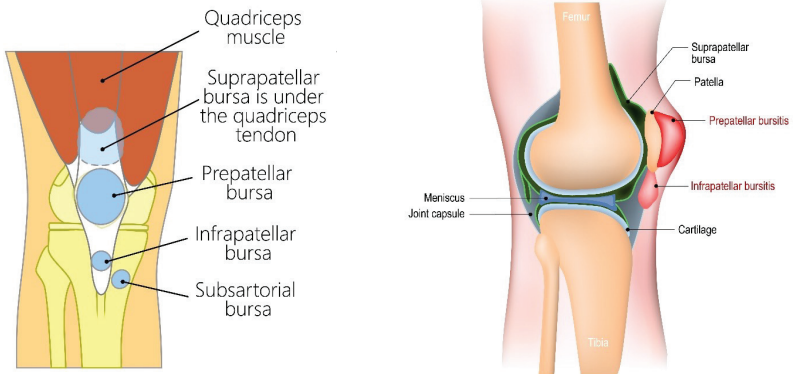


Figure 1

Front view (left) of a right knee demonstrating the location of the different bursas around a knee and a side-view (right) of a knee highlighting an inflamed pre-patella bursa (red).

Causes

Middle-aged men are more likely to get this condition.

▣ Recurrent pressure

If you have a job that requires kneeling for long periods (e.g. plumber, gardeners, carpenter), you are at greater risk of developing pre-patellar bursitis.

▣ One-off injury

A direct blow to the front of your knee can lead to bleeding into the bursa and subsequent bursitis. Athletes in professions that lead to falls onto their knees are more prone (e.g. volleyball players, footballers, wrestler).

▣ Inflammatory disease

Complications from diseases such as osteoarthritis, rheumatoid arthritis or gout in your knee can also lead to pre-patellar bursitis.

- **Bacterial infection**

An innocuous injury to your knee that breaks your skin (e.g. scrape, puncture wound, insect bite) may be enough to introduce bacteria into your bursa and cause an infected bursitis.

Symptoms

You may experience the following:

- Pain and swelling over (and below) your kneecap – this can make it very difficult for you to kneel down and/or bend your knee.
- If your problem has been going on for some time, the bursa may become chronically inflamed such that it can feel very thick and/or 'lumpy' to touch.
- If the cause is a bacterial infection, you may have a fever, feel unwell and notice redness that spreads beyond the limits of your kneecap.

Diagnosis

The diagnosis of this condition is mainly a clinical one but you may be sent for investigations such as x-rays (to rule out a break in your bone if this was following a direct blow) and/or scans of your knee to exclude other possible reasons for your pain.

Treatment

- **Activity modification**

Stop aggravating activity and consider using knee-pads or thick-foam cushions if kneeling cannot be avoided.

- **Ice Packs**

Apply several times daily for a period of 15 minutes each time to help the swelling.

- **Compression**

Consider an elastic knee bandage to apply compression over the bursa.

Anti-inflammatory medication

- If oral preparations do not help, consider topical formulations to rub over the swelling. Anti-inflammatories may have adverse side-effects if you have certain medical conditions or take certain medications so please consult with your GP prior to commencing.

- **Antibiotics**

If there is infection of your skin and/or soft tissues around the bursa, a course of antibiotics may be required. This could be orally if mild or intravenously (through your veins) if the infection is severe.

- **Aspiration**

If the fluid within the bursa does not subside on its own accord and is causing you significant trouble, it can be drained through inserting a needle into the bursa, followed by application of compression bandaging. This may help in the short-term but there is a risk of re-accumulation of the fluid with time. Drainage may also be considered if an infection is suspected. The fluid can be sent to the microbiology laboratory for analysis.

- **Cortico-steroid injections**

This involves an injection of a powerful anti-inflammatory medication into the bursa to try and reduce the inflammation.

Outcome

Most cases of (non-infected) pre-patellar bursitis resolve without complication over a few weeks. Infected pre-patellar bursitis poses greater risks of complications and will often require early intervention to prevent it from worsening.



CONSULTANT HIP & KNEE SURGEON
BMedSci FRCS (Trauma & Orthopaedics)

📍 RIVERS HOSPITAL
Private
High Wych Road
Sawbridgeworth
CM21 0HH

☎ 01279 602718

📍 THE PRINCESS ALEXANDRA HOSPITAL
NHS
Hamstel Road
Harlow
CM20 1QX

☎ 01279 827060

To arrange a private consultation with Mr Kosuge:
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