

Mucous Cysts (Digital Mucous Cysts)



What is a Mucous Cyst?

A **mucous cyst**, also known as a **digital mucous cyst**, is a small, fluid-filled swelling that usually develops near the **distal interphalangeal joint (DIP joint)**—the joint closest to the fingertip.

These cysts are a type of **ganglion cyst** and are commonly associated with underlying **osteoarthritis** of the DIP joint. They are typically found on the **back of the finger**, often just below the nail.

Mucous cysts are **benign (non-cancerous)** and do not spread. However, they can cause discomfort, affect nail appearance, and occasionally lead to skin breakdown if left untreated.

Causes and Risk Factors

Mucous cysts are commonly associated with underlying joint wear and degeneration.

Common contributing factors include:

Osteoarthritis

Mucous cysts are frequently linked to **osteoarthritis of the DIP joint**. Small bony growths (**osteophytes**) may form within the joint, allowing fluid to escape and form a cyst.

Age

Mucous cysts are more common with increasing age and are most often seen in adults over **40 years of age**.

Previous Injury

Prior trauma to the finger joint may increase the likelihood of developing osteoarthritis and mucous cysts.

Joint Degeneration

Wear and tear within the joint can lead to increased fluid production, contributing to cyst formation.

Symptoms

Symptoms of mucous cysts can vary depending on their size and location.

Common signs include:

- A **small lump** on the back of the finger near the nail
- A cyst that may appear **translucent or shiny**
- **Tenderness** around the affected joint
- **Pain** in the finger, particularly if arthritis is present
- **Reduced movement** in the DIP joint
- **Changes to the fingernail**, such as ridging or deformity
- Thinning of the overlying skin

In some cases, the cyst may **rupture**, leading to leakage of fluid and increased risk of infection.

Diagnosis & Investigation

Mucous cysts are usually diagnosed **based on clinical history and physical examination**.

During your visit:

- The surgeon will assess the **size, position, and appearance** of the cyst.
- The surrounding joint will be examined for signs of **osteoarthritis**.
- Nail changes, if present, will be assessed.

Imaging

- **X-rays** are commonly performed to assess the **DIP joint** and identify underlying osteoarthritis or osteophytes.
- Imaging helps guide treatment decisions.

Additional imaging is **rarely required**.

Non-Surgical Treatment

Non-surgical treatment may be considered if symptoms are mild.

Non-surgical options may include:

Observation

If the cyst is small and not causing significant symptoms, observation may be appropriate.

Some cysts remain stable without treatment.

Protection of the Skin

Care may be taken to protect the thin skin over the cyst to reduce the risk of rupture.

Aspiration

In selected cases, the cyst may be drained using a needle. However, recurrence is common, and this is not always recommended due to the risk of infection, particularly when the skin is thin.

Splinting is **rarely useful as a treatment alone**, but may be beneficial following surgical treatment.

Surgical Treatment

Surgery may be recommended if the cyst is painful, recurrent, enlarging, or causing skin or nail problems.

Mucous Cyst Excision

This procedure involves removing the cyst along with the underlying **osteophytes** and the cyst stalk connecting to the joint.

Key points about the procedure:

- Usually performed as a **day-case procedure**
- Typically carried out under **local anaesthetic**
- A **small incision** is made over the cyst
- The cyst is removed
- **Underlying osteophytes** are often removed to reduce recurrence
- The wound is carefully closed

Removing associated osteophytes helps reduce the risk of recurrence.

In cases where the skin over the cyst is very thin, additional techniques such as **local skin flaps** may be required to achieve safe closure.

Recovery

Recovery following mucous cyst treatment depends on the treatment performed.

- **Hand therapy** is not always required but may be recommended in selected cases.
- Some swelling and tenderness are common following surgery.

Recovery times vary depending on treatment:

- Following **surgical excision**, light activities may resume within **1–2 weeks**.
 - Most patients regain improved finger movement once the wound has healed.
 - Nail deformities often improve gradually after treatment.
 - Full recovery may take **several weeks**.
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Risks

Although treatment is usually successful, complications can occur, including:

- Recurrence of the cyst
- Infection
- Stiffness of the DIP joint
- Delayed wound healing
- Nail deformity
- Skin breakdown
- Persistent pain
- Injury to nearby structures (rare)

Careful surgical technique helps reduce complications.

When to See One of Our Hand Specialists

You should consult a hand specialist if:

- You notice a **lump near the fingernail**
- The cyst becomes **painful**
- The skin over the cyst becomes thin or breaks down
- You develop **nail changes**
- The cyst increases in size
- Symptoms interfere with everyday activities

If the cyst ruptures, becomes red, painful, or shows signs of infection, this should be assessed urgently in the Emergency Department (A&E) or by a medical professional.

Book an appointment:

