

DIPJ arthritis

X-ray of DIPJ arthritis: the joint space at the tip of the finger has narrowed and small bone spurs are forming around the worn cartilage – the pattern that produces Heberden nodes.

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X-ray of a finger showing distal interphalangeal joint arthritis, with narrowed joint space at the tip and a small bony spur on the side.

What you're feeling

You likely feel pain and stiffness right at the very tip of your finger, where the joint meets your fingernail. This is the distal interphalangeal joint, or DIP joint. The pain often flares up after you use your hand for daily tasks like reaching behind your back to fasten a bra or tucking in your shirt. You might notice the pain is worse when you first wake up in the morning and eases as you move your hand around.

Over time, the joint may change shape. The tip of your finger can bend inward, creating a curve known as a swan neck deformity. This happens because the joint develops a flexion contracture, which means it gets stuck in a bent position. If you have had a previous injury like a mallet finger fracture, you might see signs of wear-and-tear arthritis. This condition follows a similar path to natural aging in the joint and leads to a decrease in your range of motion.

Daily life can become difficult when the joint swells or locks. You may find it hard to grip objects or perform fine movements. In some cases, the joint feels unstable or “floats,” which can be confusing if there is little visible deformity. While the pain can be bothersome, it is important to know that visible changes on an X-ray do not always match how much pain you feel. Your surgeon will look at your specific symptoms to guide your care.

What's actually happening

Your distal interphalangeal joint (DIP joint) is the small hinge at the very tip of your finger. Inside, smooth cartilage acts like a shock absorber, letting your bones glide past each other without pain. When wear-and-tear arthritis develops, this coating wears away. The bones begin to rub directly against one another, causing the grinding and stiffness you feel. This damage can also pull the joint out of place, often pushing the tip of your finger backward.

The tendon that bends your finger tip is like a strong rope attached to the bone. If this rope tears or if the joint becomes unstable, the tendon cannot pull the finger smoothly. Sometimes, the joint gets stuck in a bent position, known as a flexion contracture. Over time, this deformity can worsen, making it hard to straighten your finger or use it for daily tasks.

Your surgeon looks at how much of the joint surface is damaged to decide the best path forward. If the bone is too small for standard screws, or if the joint is stuck in a bad position, special techniques are needed. The goal is to stop the pain and restore function, whether by fusing the bones together or using a soft implant to keep some movement. These options aim to give you relief while protecting the remaining strength of your finger.

What we can do about it

You can start by managing the pain yourself and working with a physiotherapist. Splinting the distal interphalangeal joint reduces pain and improves extension without causing stiffness or restricting your movement. However, keeping this joint still will reduce your overall grip strength, with the effect becoming stronger as you move from your index finger to your little finger. You should give these non-surgical methods time to work before considering more invasive steps.

If simple measures are not enough, your surgeon may discuss medical options to manage your symptoms. While the evidence highlights specific surgical alternatives, it notes that injections like collagenase can help with joint contractures, though you must weigh the risk of the problem returning. For those with severe pain affecting both the middle and end joints of the same finger, treating them together is often recommended. Your surgeon will also consider your personal health, as factors like diabetes can increase the risk of complications after treatment.

When conservative care reaches its limit, surgery may be considered to stop the pain or restore function. Your surgeon might choose a motion-preserving procedure to keep your joint moving, or a fusion to lock the joint in place for stability. In some cases, a silicone implant is used to provide excellent pain relief and a range of movement of 30–40 degrees with a low overall complication rate of 5%. The specific approach depends on your joint's condition and your goals for daily life.

When to see someone

See your GP if you have persistent pain that does not improve with rest, or if your finger feels weak and unstable. Ask for a specialist review if your joint locks, gives way, or if symptoms interfere with your sleep or work. You should also seek help if you notice a sudden worsening of symptoms. Be aware that some conditions, like a floating distal interphalangeal joint injury, can show minimal deformity at first yet still lead to arthritis later. Early diagnosis helps distinguish these issues from other joint problems.