CQ HAND + UPPER LIMB
SPECIALIST ORTHOPAEDIC SURGEON

PATIENT INFORMATION

Ulnar Collateral Ligament Injury (Tommy John Injury)

What you're feeling

If you throw a lot – baseball, javelin, or any sport with hard overhead throwing – you may notice an ache or pain on the **inner side of the elbow**. It often comes on at the moment of maximum effort, just before your arm whips forward to release. Many throwers describe it as a deep, nagging soreness right over the bony bump on the inside of the elbow.

The other common clue is that **your throwing changes**. You lose a bit of speed, your throws lose their usual accuracy or "pop," or you simply can't throw as hard or as long as before. Sometimes the pain builds up gradually over a season; occasionally a single throw causes a sharp pain or a "pop" and the elbow suddenly feels unstable or useless.

Some people also notice **tingling, numbness or pins-and-needles** running into the ring and little fingers. That happens because a nerve passes right behind the inner elbow, and swelling or instability in that area can irritate it.

What's actually happening

A strong band of tissue called the **ulnar collateral ligament (UCL)** sits on the inner side of your elbow. Its job is to stop the elbow from gapping open on the inner side when force pushes it that way – a movement called **valgus**. Throwing puts enormous, repeated stress across exactly this ligament. Each hard throw stretches it a little, and over thousands of throws the ligament can slowly fray, thin out and weaken. Less often, a single violent throw tears it.

When the UCL is damaged it can no longer hold the elbow firmly, so the joint becomes a fraction loose under throwing loads. That looseness is what causes the pain, the loss of velocity and command, and sometimes the nerve symptoms. This is the same injury made famous as **"Tommy John,"** named after the first baseball pitcher to have it surgically reconstructed and return to throwing.

It's worth knowing that this is overwhelmingly a **throwing-athlete injury**. For people who don't do repetitive overhead throwing, a damaged UCL rarely causes problems in everyday life, because ordinary activities don't load the ligament the way pitching does.

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What we can do about it

The right treatment depends on how badly the ligament is damaged, and – just as importantly – on whether you need to return to high-level throwing.

Non-surgical treatment comes first for partial or low-grade tears, and for anyone who doesn't need to throw competitively. This means a period of rest from throwing, then a carefully staged rehabilitation programme that rebuilds strength in the forearm, shoulder and core, corrects throwing mechanics, and brings you back to throwing gradually through a structured "throwing program." Injections of substances such as platelet-rich plasma (PRP) are sometimes offered to encourage healing, but the evidence that they help is still uncertain.

Surgery is considered when the ligament is completely torn, or when good rehabilitation hasn't allowed a committed thrower to get back to the mound. There are two main operations:

- **UCL reconstruction ("Tommy John surgery").** The damaged ligament is rebuilt using a tendon graft, usually taken from your own forearm or leg, threaded through small bone tunnels to recreate a new, strong ligament. This is the long-established, proven operation for throwers.
- **UCL repair with an internal brace.** In selected younger athletes whose ligament has pulled cleanly off the bone at one end (rather than frayed throughout), the surgeon can stitch the ligament back and reinforce it with a strong tape. This tends to allow a **faster return to throwing**, and is reserved for the right kind of tear.

In both operations the surgeon also checks the nerve on the inner elbow and protects or moves it if it is being irritated.

What to expect

For most throwers who have surgery, the outlook is genuinely good: the large majority return to their previous level of throwing, though it takes patience. Reconstruction (Tommy John) typically means a staged recovery over roughly a **year or more** before competitive throwing, while a repair with internal brace in the right patient can be quicker. Either way, the comeback is driven by a long, structured rehabilitation program, not by the operation alone – rushing back is the main reason for setbacks.

Recovery is not guaranteed to be universal: a small number of athletes don't return to the same level, and the nerve symptoms or the graft sometimes need ongoing attention. But with a clear diagnosis, the right choice of treatment, and committed rehab, the results for this injury are among the most rewarding in sports surgery.

When to see someone

- **Inner-elbow pain when you throw**, especially if it keeps coming back or is getting worse over a season.
- A **drop in your throwing velocity, accuracy or stamina** that you can't shake off with rest.

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- A sudden **“pop” or sharp pain on the inner elbow** during a throw, after which the arm feels weak or unstable.
- **Numbness, tingling or weakness** in the ring and little fingers.
- Inner-elbow pain in a **young or growing thrower** — a child’s growth plate can be injured by the same throwing stress and needs prompt assessment.

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