DR TARR. INTERVENTIONAL RADIOLOGY · BRISBANE & IPSWICH

PATIENT FACTSHEET

JOINT & TENDON PAIN · GENICULAR ARTERY EMBOLISATION & TAME

Knee & Musculoskeletal Embolisation (GAE)

Genicular artery embolisation targets the abnormal blood vessels that drive osteoarthritis knee pain; TAME applies the same principle to stubborn tendon and joint pain elsewhere. Walk in, walk out, no surgery.

AT A GLANCE

Anaesthesia **Sedation**	**Hospital stay** **Day case, walk out**	**Procedure time** **45 to 90 minutes** **Back to work** **A few days**
Relief begins **Typically 2 to 6 weeks**	**Repeatable** **Yes; surgery stays open**	**Cost** **Usually no gap on fee***

The problem: pain that won't settle

In knee osteoarthritis, and in chronic tendon conditions like tennis elbow, plantar fasciitis and rotator cuff tendinopathy, the body grows clusters of abnormal new blood vessels at the painful site. Alongside them grow new nerve endings, and together they sustain inflammation and pain. This is why some joints and tendons stay painful for years despite physiotherapy, medication and injections.

How embolisation works

Embolisation switches those abnormal vessels off. Through a pinhole in the groin or wrist, a microcatheter is guided to the arteries around the knee (the genicular arteries) or the affected tendon, and tiny particles are injected into the abnormal vessel clusters. Normal vessels are spared. With the abnormal vessels gone, the inflammation and pain signalling they sustain wind down. For tendons and other joints the technique is called transarterial micro-embolisation (TAME).

Who it suits

- Knee osteoarthritis pain not controlled by physiotherapy, medication or injections
- People not ready for a knee replacement, or wanting to delay one
- People whose health makes joint replacement surgery risky
- Chronic tendon pain (elbow, shoulder, Achilles, plantar fascia, gluteal) beyond three to six months despite standard care
- Persistent pain after some types of previous knee surgery, assessed case by case

What to expect

1. **Consultation and imaging review.** Your imaging and previous treatments are reviewed to confirm the pain pattern fits and embolisation is likely to help.
2. **The procedure (about 45 to 90 minutes).** Under sedation, through a single pinhole. Contrast imaging maps the abnormal vessels in real time before they are treated.
3. **Home the same day.** You'll be walking before discharge. Mild ache or skin mottling near the treated area for a few days is common and settles.
4. **Relief over weeks.** Pain typically improves over two to six weeks. You continue physiotherapy to convert pain relief into strength and function.

Results and risks, honestly

GAE is a newer treatment supported by a growing body of international trials: the majority of well-selected patients experience meaningful pain reduction lasting one to several years, and the procedure can be repeated. It does not regrow cartilage and is not a substitute for joint replacement in end-stage arthritis. It is a way to control pain and stay active in the years before, or instead of, surgery. Risks are low: temporary skin discolouration or numbness, a small bruise at the puncture site, and an ache for a few days are the common ones. Non-responders exist, roughly one in four or five gets less relief than hoped, and careful patient selection is the main defence, which is exactly what the consultation is for.

Common questions

Will this replace my knee replacement? No. If your arthritis is end-stage, replacement remains the definitive treatment. GAE suits the long middle phase: real pain, but not ready (or not able) to have a joint replaced. It never burns bridges; replacement remains fully available afterwards.

How long does the relief last? Published studies report benefit commonly lasting one to four years, and the procedure can be repeated. Individual results vary, which Dr Tarr discusses frankly against your imaging and symptoms.

Which tendon problems can TAME treat? The strongest experience is in tennis elbow, plantar fasciitis, Achilles and shoulder (rotator cuff) tendinopathy, and gluteal tendinopathy, typically when pain has persisted beyond three to six months of proper conservative care.

APPOINTMENTS & REFERRALS
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For GPs: refer by naming **Dr Gregory Tarr** (Medical Objects: "Dr Gregory Tarr"). Every consultation covers all of the patient's options, not just this one.

*For privately insured patients, most procedures involve no gap on Dr Tarr's fee; hospital or anaesthetic costs may still apply. Your individual costs are confirmed in writing before booking.

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