

Elbow Contracture Release

If there is problematic stiffness in the elbow, due to soft tissue contracture, surgery may be effective at increasing movement. This may be following trauma. Initial non surgical treatment involves physiotherapy and use of anti-inflammatory medications. If progress is not sufficient after several months then surgery may be indicated in some cases. Generally the goal is to get the elbow range of motion to more than 50% closer to full movement than pre surgery. So if the maximum elbow extension is 30 we would aim for less than 15 restriction of extension post surgery. Reviewing my own results the average increase in overall range of movement is 40.

Prior to Surgery

- Physiotherapy, with appoints to be made for after surgery.
- Fitting of a range of motion brace to be worn in full extension after surgery.

Surgery

- The contracted elbow capsule is released and excised and a plaster reinforced bandage is applied with the elbow in extension.
- The next day, this is removed and the elbow is moved through full movement using a CPM (continuous passive movement) machine.
- A tubigrip bandage is applied and the elbow brace applied.
- A course of anti-inflammatories is given unless there is a medical reason not to.

Rehabilitation

- Expert physiotherapy is essential initially, without outpatient elbow CPM, intermittent active range of movement, brace use (especially night bracing in full extension) and periods of resting in flexion in a collar and cuff sling.
- Over a few weeks each of these modalities are gradually used less depending on progress.

Risks

- The general risks of surgery (eg. anaesthetic risks and infection) apply but are very uncommon.
- The special risk is neurological injury. If nerves are injured during surgical excision of contracture tissue, there may be permanent numbness and weakness in the wrist and hand. This is uncommon.

Return to Work Guidelines

This varies depending on the preoperative severity of disability. A lot of time every day in the first few weeks from surgery is spent doing structured rehabilitation. In general, aim for sedentary and light duties 2 – 3 weeks from surgery, medium activities 6 – 8 weeks from surgery, gradually building up.