

Issue 29 January 2015

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Surgical management of osteoarthritis of 1st Carpometacarpal joint.

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What are free flaps? What is the fuss?

Free flaps are the microvascular transfer of tissue from a donor to a recipient site. They involve tissue being raised on it vascular supply and reconnected to a blood supply at its recipient site.

The first free flap performed in the 1970's was the transfer of groin tissue to the dorsum of the foot. Since then there has been a rapid expansion in what is able to transferred and what can be done. This has enabled defects to be reconstructed that previously were not reconstructable.

Tissues that can be transferred on their blood supply include skin, fat, muscle, bone and nerve. Common free flaps used for reconstruction are the radial forearm flap, anterolateral thigh flap, latissimus dorsi muscle, tibia, rectus muscle and DIEP flaps. The type of flap chosen for the reconstruction depends on a number of factors:

- 1. Requirements of the defect to reconstruct e.g.: skin, muscle, bone
- 2. Aim to minimise donor site morbidity
- 3. Length of vessel required on donor tissue to reach recipient vessels.

These flaps are commonly used to reconstruct lower limb trauma, breast and head and neck reconstruction. Cases take between 4 to 10 hours and involve the micro-anastomosis of an artery and vein between 0.5 to 2mm in size.

Post operatively these cases require intense observation to identify if the vessel clots. If this occurs the flap can often be salvaged by redoing the micro-anastomosis. Patient stay in hospital is between 5-10 days depending on the flap and type of reconstruction. 98% of free flaps reconstructions are successful.

Surgical management of osteoarthritis of 1st **Carpometacarpal joint**

The 1st Carpometacarpal joint (CMCJ) is one of the most commonly affected joints with osteoarthritis (OA). This can lead to debilitating symptoms such as pain, decreased grip strength and dexterity.

The most common management for CMCJ arthritis is steroid injection and splinting. It is important that the 2 are done together for maximal benefit. The success rate however depends on the degree of arthritic change.

Surgery is an option for people who fail conservative measures. There are a number of different surgical techniques to address this issue. These include:

- ligament of the 1st metacarpal. Good long term results.
- trapezium-scaphoid joint.
- poor.

The technique chosen for each patient is dependent on their age, occupation and the level of disease. Recovery from surgery can take up to 3 months and requires participation in regular hand therapy.

We are very excited to announce that we now providing our own Hand Therapy Service here at WPRS! Natalie Tongs will provide our patients with hand rehabilitation five days per week, and will also be accepting referrals directly from General Practitioners for Hand Therapy.

Please call us on 5562 5330 for all hand therapy appointments and enquires.



1. Trapezectomy and distraction arthroplasty: involves excision of the trapezium and stabilisation of 1st metacarpal with a k-wire for 4 weeks. Reliable technique that avoids potential complications from flexor carpi radialis tendon harvest. 2. Trapezectomy with ligament reconstruction: in addition to excision of the trapezium, half of FCR tendon is harvested and used to reconstruct the volar beak

3. Trapezium- metacarpal fusion: fusion of 1st metacarpal to trapezium. Provides good strength in young people; however may not resolve pain if OA involves

4. Implant arthroplasty (joint replacement or spacer): Long term results are generally

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