

Patient Information Sheet

Total Elbow Replacement for Arthritis or Fracture

What's the Problem?

Your elbow joint acts as a hinge and rotatory joint. Smooth gliding of the joint is facilitated by cartilage. When this wears down, there is bone on bone articulation – otherwise known as osteoarthritis. This leads to pain, stiffening and difficulty using the arm.

Sometimes, severe fractures of the bones of the elbow might make fixation impossible, and total of hemi (half) elbow replacement can be performed instead.



How can you treat it?

In some instances, non-surgical treatment is appropriate. This includes:

- Taking pain relief
- Steroid injections
- Physio to mobilise the elbow and surrounding muscles/tendons

Ultimately, surgery is only reserved for patients whose symptoms are too severe to continue with non operative measures.

The Operation:

A total elbow replacement involves an incision down the back of the elbow and arm. The ulnar nerve is identified and released to protect it. The worn out parts of the elbow (or fractured parts) are then exposed and removed. A total elbow prosthesis involving both the humerus (the long bone above) and the ulna (the long bone below) are then inserted with cement to hold them in the correct position. The elbow joint is reduced and the wound closed.



The Anaesthetic:

You will be asleep for the duration of the operation (ie a general anaesthetic).

The anaesthetist may talk to you about a nerve block before the operation, which helps with pain relief and generally lasts 24-48 hours. Alternatively, Mr Lau can put local anaesthetic into the wound whilst you are asleep, which can also help reduce pain.

What are the Risks of this Operation?

- **Infection:**
Usually only a superficial wound infection to the top-most layer of the skin. In rarer cases a deep infection can develop and this is a serious complication that may require further surgery and exchange of the implants. Rare but serious, ~1%.
- **Stiffness and ongoing pain:**
It is common to have stiffness for a few months after the operation and in some cases the elbow may not be able to straighten fully. This is because your elbow tends to stiffen with fibrous or scar tissue after surgery. Physio will help with improving movement, but some elbow rehabilitation will be required.
- **Damage to the nerves and blood vessels around the elbow.**
Rare but serious, <1%
- **Ulnar nerve irritation:**
The ulnar nerve controls most of the movement in the hand. Often during the operation it is released and sometimes moved so that it does not come under compression. This can lead to some numbness to the little finger side of the hand, though this improves with time.
- **Loosening of the Implants:**
This is not likely to happen for many years after the surgery. The implants used by Mr Lau have an excellent track record in the AOA National Joint Registry.
- **Weight bearing restriction:**
A replaced elbow can have difficulty transmitting large forces across it. As a result, there is usually a 5kg lifting restriction after surgery, which will need to be maintained for life. If more than this is regularly passed through the elbow, there is a higher risk of implant loosening and prosthetic failure.

Benefits:

If Mr Lau recommends total elbow replacement, it is because he feels you will have a better outcome with surgery. In particular, your elbow will be more pain free, and have greater functional improvements than if it was treated non surgically.

What can I expect?

You will wake up with your arm in a sling after your surgery. If you have had a nerve block, you shouldn't feel any pain till the next day. The nurses will provide you pain relief and the next morning a physio will see you to go through some exercises you can do to mobilise the elbow, fingers and wrist to prevent excessive stiffness in these joints. These exercises will change over the next few weeks to months but you should try to do them regularly to maximise your rehabilitation.

Most patients spend 1 day in hospital after surgery, before going home. A number of allied health staff (physios, occupational therapists) will make sure you have adequate support at home before discharge. An appointment will be made for you for a wound check at 2 weeks. At this time, the dressings will be removed and you should just need to be in a sling. Another appointment with Mr Lau will be at 6 weeks with repeat XRs.

These notes have been prepared by Mr Simon Lau. They are general overviews and information aimed for use by his patients. They reflect Mr Lau's views, opinions and recommendations. They do not constitute medical advice. The contents are provided for information and education purposes only. Please seek Mr Lau's specific advice with any questions regarding medical conditions and treatment.

What should I avoid doing?

- In the first 2 weeks:
Keep your wound dry. Try to mobilise your elbow, fingers and wrist as much as possible
- Between 2 and 6 weeks:
Your arm will be in a sling, which you can gradually use less and less. Gentle flexion and extension of the elbow is possible, as well as continued wrist/finger exercises. You can pick up lighter objects such as a phone or cup with the affected side. You will have physio or hand therapy to help you with rehabilitation
- Between 6 and 12 weeks:
Full mobilisation of the wrist, fingers and elbow. The only restriction is no heavy lifting of objects up to 5kg till after 12 weeks. You shouldn't need a sling any longer.

Return to...?

- **Work**
Depends what you do. Desk based work can be done from 2 weeks post operatively, if you can do these tasks single handedly. Otherwise generally 6 weeks before you can use both hands freely whilst seated.
For manual work, it depends on what kind of lifting/pushing you do, but generally not before 3 months and the 5kg lifting restriction applies for life
- **Drive**
In Australia, you can't drive unless you are in full control of both your arms. Therefore, whilst you're in a sling, you cannot drive. Generally 6 weeks post operatively.
- **Sports/Hobbies:**
 - Gentle swimming: after 3 months
 - Gardening (light tasks only): 8-12 weeks
 - Bowls: after 3 months
 - Golf, tennis, badminton, squash: after 4-6 months
 - Weights: commence after 3 months but with a 5kg lifetime lifting restriction

Concerns or Questions?

If you have any concerns post operatively, or you would like further information, please contact Mr Lau through the VBJS on 03 5752 5020 or via email at admin@vbjs.com.au