



Fracture of the Olecranon Process (elbow): Rehabilitation & Recovery

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A first-hand account of the experience of recovery and rehabilitation from an olecranon fracture, as recounted by a client of the Physiodynamix practice.

The client is a 38 year-old female, who is a recreational cyclist (both road and mountain biking). This was her first experience of a broken bone, and as an exercise physiologist the experience was of interest from many aspects both personally and professionally.

Note that all experiences will differ – this is certainly not an account that will match another one exactly. This is simply a description of one person's experience in the hope that by reading it, it could provide helpful insights.

Day 1: The Accident

Picture the scene: a mid-winter's day on the Highveld, cyclists lining up at the start, blowing on chilled hands and jiggling cold legs. The countdown to the start. After a few pedal strokes, it was time to cleat in the second foot (it's never a good idea to do that too soon!). Into my peripheral vision came a cyclist who cut across from far left to the right of me, in the process uprooting my front wheel, leaving me on the ground, somewhat stunned.

That is how I fractured my left elbow, more correctly, I fractured the Olecranon Process (the pointy bit at the end), on 25 June.



Two nights in hospital, an "open reduction and internal fixation (ORIF)" and I am now the proud (and permanent) owner of a titanium plate and seven screws (during the operation it was discovered that not only was the olecranon separated from the ulna, but that it had shattered into myriad pieces).



Weeks 1 - 3

My arm was in a cast from wrist to underarm, precluding any movement at the elbow, and most movement from the shoulder caused pain (because the triceps muscle attaches on the ulna quite close to the olecranon, and thus, this was disturbed by the break). During this time my left arm and hand/fingers were not very useful, and I resorted to dictating work for a kind friend to type. I did not feel at all like doing anything physical, and felt particularly vulnerable during this time.

Weeks 4 - 6

My three week check up with the surgeon arrived with no shortage of anxiety. He cut off the cast and pronounced the wound very nicely healed. I would now be relegated to a sling for 3 further weeks, with as limited

movement as possible. I found this newly 'free' arm quite daunting and sore. Showering was indeed easier, though! By now I still hadn't got onto the indoor cycle trainer but the idea was starting to appeal. Still couldn't drive though!

Week 5 dawned with Physio session Number 1. I knew I would be in good hands with Sam from Physiodynamix. At this stage Physio consisted of manual massage, ultrasound and zero movement. In Session 1 my elbow produced 20' of flexion, compared to 140' in my right arm. We had a way to go...

Weeks 7 - 9

After five physio sessions the swelling in my arm was noticeably reduced and the soft tissue much more responsive. Extension at my elbow was good, flexion less so and with considerable effort at this stage I could achieve 90' of flexion. But this stage I could use the hand more freely for activities of daily living, but nothing onerous like carrying shopping bags or the like. I commenced driving but found a manual car quite difficult. This soon improved. Elbow flexion of 90' (at the joint) was achieved on 17 August and on 19 August I attempted my first swim as active rehab. Generally a strong swimmer, my left arm would not and could not comply! By the time I went for a second swim two days later, however, neural pathways had already improved and my arm was a lot more compliant. To provide an idea, I'm able to knock out a 1km swim in 15 minutes (when not recovering from broken bits!). These initial swim routines consisted of:

- 2 (x 20m) lengths of front crawl, rest (repeat x4)
- 2 lengths of dog paddle
- 2 lengths breast stroke
- 8 lengths kicking (using pull buoy)

And this workout took me ~30 minutes.

Weeks 10 - 12

Swimming improved noticeably each workout. I was still receiving physio treatment, but sessions had been

reduced to one per week, from two. By 15 September I had commenced using a red theraband to directly rehabilitate the triceps muscle, under Sam's direction. Pain at the site of the fracture had dulled to predominantly a feeling of discomfort.



19 Weeks later...

At the time of writing, 19 weeks have passed since the accident. That's 133 days, and 105 days since I commenced physiotherapy.

What have I learnt? Patience, and the infinite value of physiotherapy as part of a rehabilitation programme. Not one or two sessions, but a concerted and consistent attendance.

My two cents...

What would I say to someone who experiences a similar fracture? A break at a joint such as this demands very different recovery from a break that is further away from a joint. It compromises your triceps more than you imagine, and the first 4-6 weeks are very difficult, physically (you can't dress yourself adequately!) and emotionally (especially if you are accustomed to regular exercise such as cycling or running).

How important is physiotherapy? I can't stress this enough: I honestly thought that I'd go for one session, learn some rehab exercises and that would suffice. It took just one session for me to realise just how long the road would be!

Have I returned to cycling? I have been cycling on indoor trainers, running on the treadmill, and as I mentioned, swimming. However, at my surgeon's request I have not been on a bicycle –

and in fact the recommendation is that I do not cycle until the eight-month mark. Am I going to be law-abiding about this? I think so. I would prefer to see full recovery than compromise that!

Should the plate and screws be removed? No, unless they cause issues or restrict movement. I am happy that mine are not doing either, and so the recommendation is not to undergo further surgery unnecessarily.

When does this kind of fracture most commonly occur? Cycling falls and spills from motorbikes are culprits, as is falling awkwardly on the cricket field while fielding, as an example. In the same week that I fractured my elbow, a patron at a local coffee shop slipped on wet tiles and, in protecting her take-away pizza, landed on her elbow, fracturing it in exactly the same manner!

Is an operation always required? No, if the bone hasn't separated (as can be seen in the first image, circled in red, where the bone had clearly separated) then an ORIF is not necessary. If it has, then a plate and screws are likely required to fix the bone for correct healing. (K-wires can also be used, but less commonly these days).

What complications can arise from this injury? If rehabilitation is not done correctly there is a chance that the elbow will not extend (straighten) as it used to, or flex (bend) as far as it used to. The plate may cause an impingement and get in the way of movement and in some cases this might require its removal. While the recovery process is long and arduous, a fully functional elbow joint and surrounding muscles should be expected and will likely be achieved.

Book an appointment:
Physiodynamix, Cramerview Village Centre, corner of Curzon and Main Roads, Bryanston, Johannesburg.

- **Open from: 7am to 5.30pm**
- **Telephone: 011 706 7433**