IN TOUCH
Hand Therapy

HANDout
April 2020

WHEN THE LITTLE THINGS BECOME THE BIG THINGS

Ironically, when thinking of ideas for this newsletter, a quote from one of our orthopaedic hand surgeons, Ram Chandru, came to mind… "little bone, big problem", so the focus was intended to be on avulsion fractures. We also wanted to focus on the bigger picture approach in rehabilitation, of involving the sensorimotor system, movement patterning, emotions and beliefs when helping a person return to full function after a hand or wrist injury (little bone – big problem!).

Then, the Covid-19 virus crisis hit, and the little thing became a big problem overnight. From Wednesday 25th March, In Touch switched to telehealth consultations and will do so until further Government direction about face-to-face primary care consultations.

Over the last few months, the In Touch Hand Therapy team had already been working hard on instigating Physitrack in the clinic - customising exercise programmes for patients to download and use remotely on their mobile devices. We are developing a full complement of wrist exercises, proprioception retraining, thumb arthritis and wrist ligament injury programmes. Physitrack also gives us the opportunity to touch base with patients via telehealth, and we are also using Zoom. When we are able to resume our usual services excellent hand hygiene will continue to be of paramount importance, as well as the wellbeing of staff and our patients. We are lucky that

all three of our clinics have plenty of room, with the option of private treatment spaces with good ventilation.

So, with some uncertainty on the horizon, we are preparing ourselves as best we can to continue to provide the only hand therapy services in the Hornby, Wigram, Rolleston and Lincoln communities we serve.

TWO EXAMPLES OF 'LITTLE BONE' INJURIES

VOLAR PLATE AVULSIONS

These painful injuries usually occur with forceful hyperextension of the finger, frequently a 'ball versus finger' during netball, basketball, cricket or other ball sports. There is a characteristic bruising over the palmar aspect of the PIP joint, with rapid swelling.

The volar plate is a thick ligament that spans the palmar aspect of each of the MCP and IP joints, providing a firm constraint to hyperextension. In volar plate fractures the avulsed chip of bone remains attached to the distal ligament insertion, and on Xray appears as an insignificant looking flake, volar to the PIP joint.

These injuries can be managed conservatively provided the fracture fragment is not large enough to make the joint unstable or is significantly displaced. Hand therapy management is likely to include a dorsal blocking splint, swelling control and exercises to maintain PIP joint flexion, tendon glide and protection for sport when soft tissue healing has resulted in a stable joint. This injury may occur concurrently with collateral ligament injury or in severe cases following dorsal PIP joint dislocation, when surgical review may be warranted.

CENTRAL SLIP AVULSION FRACTURE

The central slip forms part of the delicate extensor tendon mechanism that slides over the dorsal aspect of the PIP joint. Central slip avulsion injuries occur when adequate forces – usually a hyperflexion of the PIP (after a ball hits the end of the finger directly) or after a dorsal subluxation of the PIP joint. Both result in an avulsion of the insertion of the central slip at the base of the middle phalanx. The central slip portion of the extensor mechanism remains attached to the avulsed fragment.

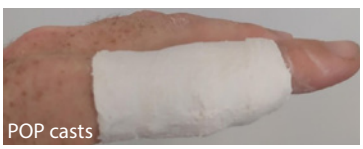
These patients are likely to present with either an inability to fully straighten or at best very weak extension of the PIP joint, or a Boutonniere deformity with hyperextension of the DIP. Some ability to straighten the joint may remain due to the integrity of the lateral bands, though their action alone at the PIP joint will be inefficient.

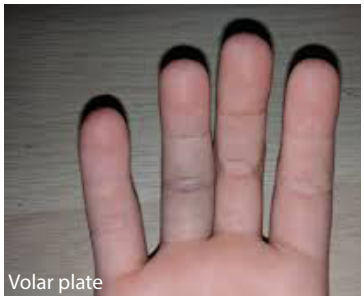
Provided the fracture fragment is not so large as to affect joint stability and is not significantly displaced – these injuries can often be managed conservatively with extension splinting for a period of 6 to 8 weeks. Options can include small POP casts to assist in managing swelling, cylinder splinting and active DIP flexion exercises to assist in bringing the lateral bands dorsally. Failure to adequately manage this injury may result in Boutonniere deformity due to the altered balance of the extensor mechanism.

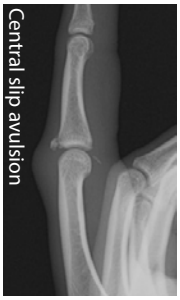

Dorsal blocking splint

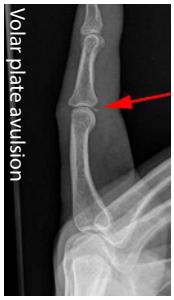

Cylinder splinting


Oval 8


POP casts

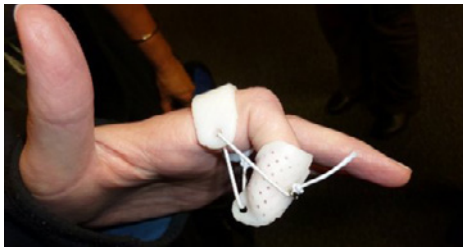

Volar plate


Central slip avulsion


Volar plate avulsion

THREE LITTLE SPLINTS…

Thumb IP flexion splint – spending time with a gentle stretch at end range, made possible with this small device



Thimble and saddle splint for end range finger flexion – gradually tightening on the elastic gives the patient control over how much stretch is comfortable, best followed with strengthening exercises at end range to use the regained movement.

Beaded splint for fine tuning motor control – sometimes you just need to see it! By giving visual cues to slide the beads, this splint guides the movement of thumb opposition, often lacking with CMC OA, but also for patients recovering from median nerve injuries.

CHATTING WITH ALISON

ITHT – Why hand therapy? I have always been interested in the intricacies of the human hand. When I first arrived in New Zealand from the UK I worked at Kew Hospital, Invercargill and loved it! There were many patients with significant hand injuries from fishing industrial accidents, burns, overuse from food processing and other traumas … I kept thinking that we could be getting better results as theres so much at stake. Hand therapy has been an interest and a huge learning curve for me that continues to this day.

ITHT – What aspect of hand therapy do you enjoy the most? Helping the whole person to recover – getting the best movement, strength and function that we can and reducing the impact that injuries have as part of the bigger picture. Also, being able to reduce fear and help improve understanding. I love introducing other people to the art of hand therapy and seeing them get excited about it.

ITHT – What do you feel the biggest challenge is today in rehab? Improving renumeration for professionals in allied health, this is a big one. Also, attracting good staff and creating a good career pathway for them that is challenging and satisfying.

ITHT – There's more to life than work, what spins your wheels? A good day in the vegetable garden, cooking dinner for family and friends when there's no time pressure and the timeless feeling when absorbed in handcrafts – sewing, drawing and more recently – potting!

ITHT – what are you reading at the moment? 'The Old Ways' by Robert McFarlane and a HBR book on Communication.

ITHT – Do you have a favourite quote? 'Nobody made a greater mistake than he who did nothing because he could do only a little' Edmund Burke

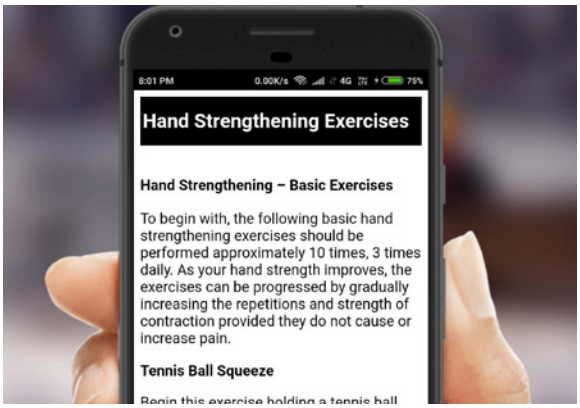
ITHT ACCREDITATION

ACC announced in 2018 that they will require all Hand Therapy service providers to hold certification against the Allied Health Service Sector Standards (NZS8171:2005) and that existing providers like In Touch Hand Therapy would have until December 2021 to ensure we are certified.

The overarching goal of such certification and the processes required to achieve accredited status is to ensure that patients using Hand Therapy services are safe, treated effectively and appropriately by skilled and well-supported therapists.

Alison and I spent many hours formalising ITHT processes and readying our practices for audit! We are proud to announce that we gained certification with DAA group in July 2019 at our initial audit – one of the first Hand Therapy practices in New Zealand to gain this certification.

Congratulations to all our staff and thanks to those patients who were interviewed about their experiences at In Touch Hand Therapy during the Audit site visit. We get to do it all again in two years time!



WE ARE LOCAL AND CONVENIENT

We have clinics in Wigram, Lincoln and Rolleston, all with great parking. Save yourself printer ink and refer using ERMS. If you would like cards or referral pads give us a ring on 349 3388.

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