

Travelling Fellowship to Instituto de Cirugía Plástica y de la Mano Santander, Spain

Supervisor: Dr Francisco Del Piñal

Dates: 25th May 2014 to 25th July 2014

Fellow: Richard Baker (Plastic Surgery Final Year Resident, UK)

What I Learnt from Dr Piñal:

1. Principles, Philosophy, Way of Thinking

A junior surgeon's duty is to study to avoid 're-inventing the wheel'

- Not all clinical solutions are in the books
- Do not give up on procedures, creativity and persistence will win the day

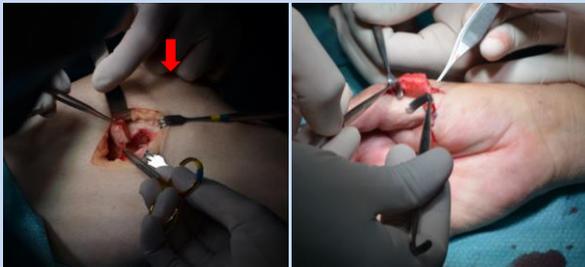


Figure 1. a) A free medial femoral condyle bone graft being harvested from the knee (the red arrow points to the kneecap) before transplantation to the thumb (b).



Figure 2. The view from Dr Piñal's operating theatre. Surely this calming view has helped him devise so many creative solutions to surgical challenges?

2. Microvascular Reconstruction

What tissue/structure is damaged or deficient, can be repaired satisfactorily and if not where in the body can you find a replica? Raise this as a free flap

- E.g. Free webspace flap from foot to reconstruct first web of hand
- Toe to hand transfers. Reconstruction of distal fingertips restores near normal sensation, power, the ability to manipulate small objects and aesthetic acceptability *for a lifetime*.
- Performed within four hours *under regional blocks* with negligible donor site effects.

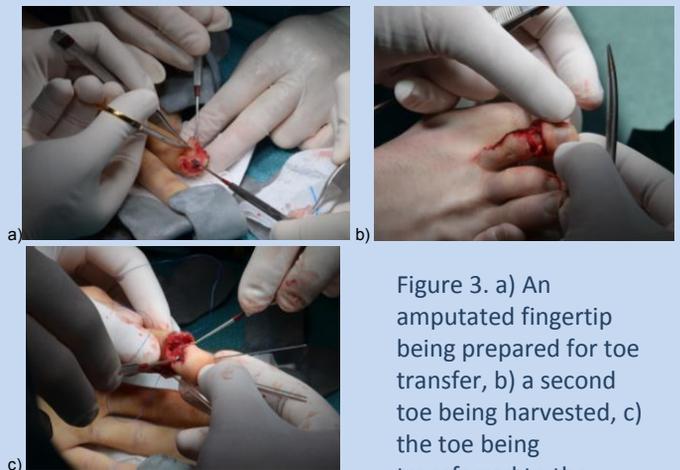


Figure 3. a) An amputated fingertip being prepared for toe transfer, b) a second toe being harvested, c) the toe being transferred to the stump of the amputated finger.

3. Minimally Invasive Wrist Surgery

'Dry' arthroscopy - no fluid extravasation into the soft tissues and can be combined with open procedures .

- For example, an intra-articular distal radius fracture can be fixed with volar plate whilst simultaneously observing the articular surface with an arthroscope to ensure no articular step-offs or defects.
- All carpal surgery including total wrist fusion (with headless cannulated compression screws) can be performed arthroscopically because the dry technique



Figure 4. (a) Using an arthroscope to look into the thumb joint to fix a fracture of the base of the thumb with a screw. (b)

4. Minimally Invasive Fracture Management

- Dr Pinal performs fixation of phalangeal and metacarpal fractures using percutaneous headless cannulated compression screws inserted via the dorsal part of the head of the phalanges or metacarpals.
- Achieves rigid fixation whilst minimising soft tissue injury

5. CRPS

- Dr Piñal is referred many patients with the diagnosis of CRPS
- Dr Pinal's belief is that these patients do not have a pain syndrome but actually have a source of ongoing pain that can be found if it is looked for and treated.
- For example, patients with distal radius fractures and CRPS - if CT scans and arthroscopies are performed then these patients often have a step-off or gap in the articular surface of the radius
- Dr Piñal operates on these patients to correct the abnormality with resolution of their pain.



What I can take back to my own practise within the NHS?

- More creative way of thinking about clinical problems.
- I will now set myself higher standards e.g. fracture fixation or management of amputation
- I will manage hand fractures with cannulated compression screws
- I will search harder for a cause of pain in patient with CRPS

Santander, 23th July 2014

This is to certify that **Dr. Richard BAKER**, Specialty Plastic Surgeon from Broomfield Hospital, has been visiting our unit as a Visiting Specialist in Hand, Wrist and Microvascular Surgery from May 25th to July 25th 2014 in the private practice and in the Hospital Mutua Montañesa.

During his time with us he has shown great interest to improve his knowledge in hand surgery and has attended all our activities: office, surgery, and clinical sessions.

Dr. Francisco del Piñal.
Jefe de Cirugía de Mano-muñeca y Plástica-reparadora.
Medicina Privada y Mutua Montañesa.

