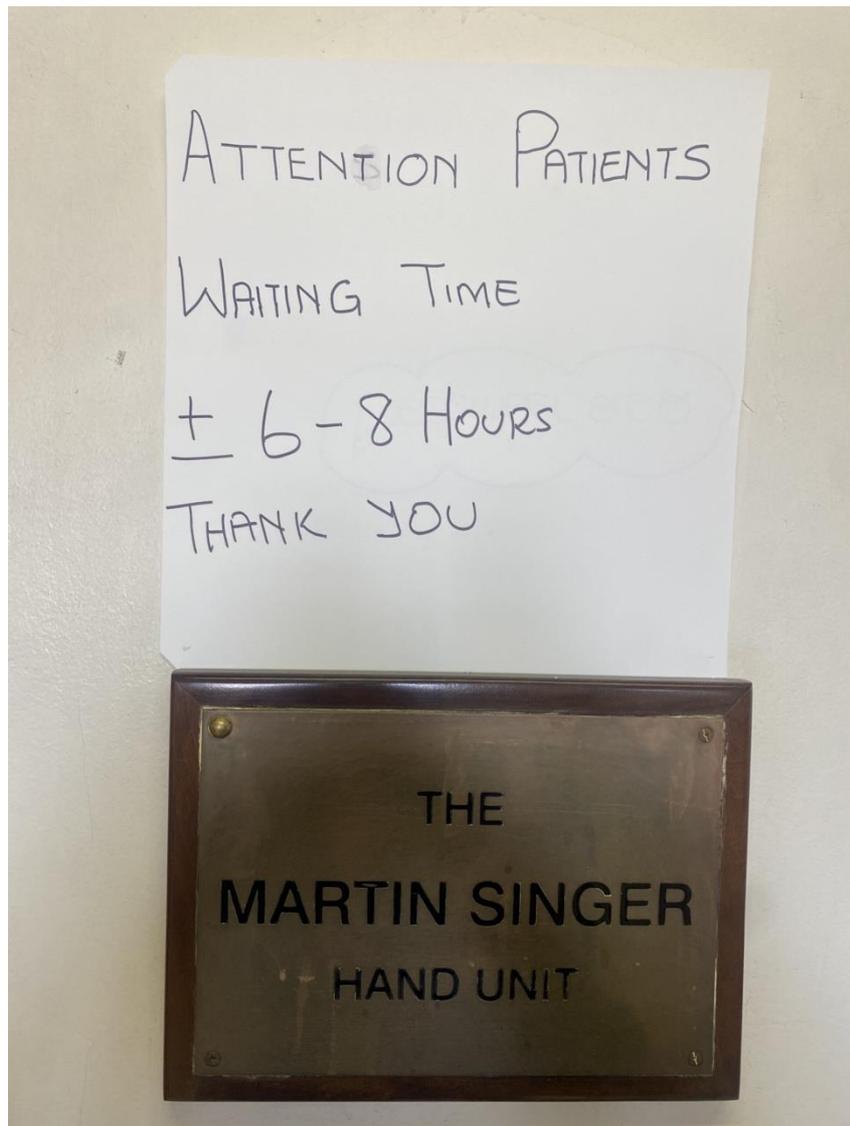


A Visit to Groote Schuur Government Hospital Martin Singer Hand Unit

**Cape Town
South Africa**

January 17th – February 24th 2024

Author: Miss Nathalie Cain FRCS Plast



1.0 Introduction

I would like to express my sincerest gratitude to the BSSH Education & Travel Committee for supporting my visit to Groote Schuur Government Hospital in Cape Town for a 5 week period in January 2024. The visit has served to further shape my career in hand surgery by enabling me to work with inspirational surgeons in a resource constrained environment who are managing a caseload spanning everything from carpal tunnel decompression to obstetric brachial plexus to tetraplegia and base of thumb replacements.

I was part of 76 surgeries in 5 weeks and I reviewed over 200 patients in a clinic environment.

1.1 Outline

I have divided my report into the following headings to highlight the key learning points from my trip to the committee.

- Thinking within a resource constrained environment
- Sepsis management
- Delayed presentations
- Plexus, Peripheral Nerve & Tetraplegia
- Teaching & Training
- An ongoing relationship

2.0 Thinking within a resource constrained environment

I have deliberately chosen the word “thinking” rather than “working”. One could argue that the NHS is, to some extent becoming a resource constrained environment; we are increasingly familiar with the concepts of patient prioritisation, lack of funding and reduction in outpatient appointments. The team in Groote Schuur are adept at thinking along this mindset due to chronic underfunding for both staff and supplies. The decision making was very focused on (topically for the UK) “Getting it Right First Time”, doing a single operation that will work and that was focused on patient specific functional needs. There were, in my visit, only 3 trauma patients managed as inpatients (apart from the occasional elective overnight stay) and all of them had multiple injuries. There were 2 options for dressings and the rehabilitation protocols were simple and easy to follow, there was clear communication with peripheral outpatient clinics.

This experience of prioritising resources and making patient focused solid first decisions is something I hope to emulate in my practice in the UK. And, in an extreme example; we did produce a Suzuki frame using elastic bands that we manufactured from cutting cross sections of a rubber Foley catheter!

3.0 Sepsis management

The term “sepsis” was used to refer to any hand infection; in any one day there would be up to 20 patients seen with “sepsis” of the hand. The vast majority of patients did not have or

complete oral antibiotics, nor were they admitted but they were managed in a same day operating theatre set up for debridement and/or drainage. The rapid local control of serious hand infections with no admission and minimal antimicrobial input was impressive to see with many patients avoiding prolonged hospital stays and almost all having only one single effective wash out rather than multiple trips to theatre.

I have never seen so much pus and cases ranged from loss of all dorsal skin requiring free flap reconstruction through to felons that had completely dissolved distal phalanges before presentation. It was impressive to see how effectively these severe cases were managed and how successful ambulatory care for infection even in perceptibly high risk patients can be.

4.0 Delayed presentations

There was often, due to the huge geographical basin draining into Groote Schuur, Cape Town, a delay in presentation due to the need to travel for days to reach the hospital or from erroneous initial management in peripheral settings. It has therefore become “normal” to operate through granulation tissue in 3-4 week old wounds, to take down fractures that were 3-4 weeks old or to manage late presentation nerve injuries with reconstructive options rather than direct repairs and to plan osteotomies for malunions.

This caseload and the reported outcomes for these patients has changed my thinking towards use of tendon and nerve transfers, grafts and osteotomies such that delayed presentations will be something to consider differently but not in fear as here in Cape Town, it was certainly not the unknown or the irregular.

5.0 Plexus, Peripheral Nerve & Tetraplegia

I visited Groote Schuur due to the reported high caseload of these injuries and I was not disappointed. Within the weeks I was there I saw 4 plexus explorations, 2 TOS decompressions and countless plexus patients at varying stages of recovery in the clinic. The surgery was fascinating, beautifully done and varied but the clinical examination and decision making for the acute and delayed patients has enhanced my clinical skills far beyond what I have achieved in my pre-CCT training in plastic surgery.

With peripheral nerve injuries we explored multiple high radial nerve injuries, all levels of median and ulnar nerves as well, largely due to stabbings. Those presenting late were managed with a reconstructive ladder of nerve transfers, tendon transfers and fusions. I made countless notes on how to address individual problems but the pattern recognition that is hopefully engrained in my brain from seeing so many so quickly, I hope to never forget.

I visited the Tetraplegia clinic at the rehab centre and saw their adapted algorithm at various stages of pre- and post- operative intervention, all patients are admitted for 3 weeks to the rehab centre post operatively to adapt their newly operated hand to their activities of daily living. The therapy team were motivated and empathetic with unique and specific insights into their patient group, some of which I hope I will be able to take with me in my UK practice.

The other striking thing here was the agility of the skillset of those working in Groote Schuur; all three consultants and all of the registrars were used to a clinic which had, regularly, a mix of trigger finger, obstetric brachial plexus, carpal tunnel, sepsis and delayed presentation adult traumatic brachial plexus. I can obviously see the benefit of subspeciality clinics within the UK which I am used to but the brain flexibility of these doctors was outstanding to witness. I came home from clinic each day exhausted but inspired and always with a tale to tell whether clinically or experientially.

6.0 Teaching & Training

There was a wonderful culture of teaching and training within the hospital. Every morning there was a well-attended case based discussion and review of the previous day's trauma and at 10.30am there was a reliable team sit down in the "blue room" for a cup of coffee, a rusk and a discussion of an interesting case. There was a weekly "tut" which comprised a 30 minute 07.00am tutorial with the Professor of Hand Surgery (Mike Solomons) during which there would be registrar and fellow interaction to go through the well-trodden "hand curriculum" established years ago for all registrars to complete. Consultants were present and available for discussion in all clinics, there was a tendency to operate solo as a trainee but with consultant availability to review and appropriately list all cases in the morning, this was well managed.

The training culture was similar to the UK but I think it stood out because it was maintained despite the busiest of caseloads. It was refreshingly brilliant that there was not a power point in sight in the week and yet there was a two day hand trauma conference organised for all trainees to attend with speakers from all over South Africa. The short, sharp tutorials and case based discussion is something I will aim to do more of in the UK.

7.0 An ongoing relationship

There is a fellowship post in the Groote Schuur hospital that is a minimum of 9 months, it is oversubscribed but not advertised and is frequently attended by Dutch trainees or new consultants. I would love to see the fellowship recognised by the BSSH off the back of this trip and will find a way to report this opportunity in more depth to the training committee to try to establish that. I am planning to attend as a formal fellowship in 2026/27 if my training permits and, at present I can think of nowhere better to set me up to be scared of nothing, make patient focused decisions and keep everyone ambulatory even if there is only a Foley catheter and 2 dressings to back me up!

Thank you to the BSSH once again for this amazing opportunity.