

FESSH Travelling Award 2015



October- December 2015
Francesca Toia, Palermo, Italy

Thanks to the FESSH training award, I was able to visit the Department of Hand surgery and the C.A.R.E. (Center for advanced reconstruction of extremities) at the Sahlgrenska University Hospital of Gothenburg, Sweden, directed by Ann Nachemson and Carina Reinholdt respectively.

The main purposes for my visit were:

- 1) To get further insight into hand reconstruction in tetraplegic patients
- 2) To deepen my knowledge on osteosynthesis, prosthesis and bone reconstruction and broaden my education in hand surgery, which is mainly based on a plastic surgery background.

The Department of Hand surgery of the Sahlgrenska University Hospital is a big and renown Department, where a wide range of hand diseases are treated, including trauma, congenital anomalies, wrist injuries, rheumatoid hand, and peripheral nerve injuries. Microsurgical reconstruction is also performed.

C.A.R.E. offers highly specialized treatment for patients with tetraplegia, provided by a multidisciplinary team of surgeons, physiotherapists and occupational therapists. One of the most commonly performed operations developed at this center that I was able to learn during my visit is the "Alphabet" or ABCDEFG procedure (Advanced Balanced Combined Digital Extensor Flexor Grip reconstruction), which combines procedures for active key pinch and finger flexion together with passive opening of hand in a one-stage operation.



Grip function after the "Alphabet" procedure (right), compared to preoperatively (left)

If the patient lacks a functional triceps, elbow extension should be reconstructed before, as the ability to straighten the arm increases the personal workspace.



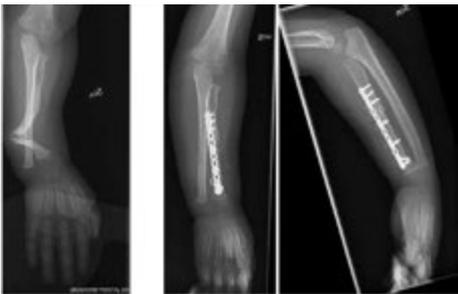
Elbow extension after reconstruction with transfer of the posterior deltoid to triceps muscle.

During my visit at the Department of Hand surgery, I had the possibility to assist in different operations for osteoarthritis, as partial and total wrist fusion, proximal row carpectomy, and prosthetic arthroplasty, as well in operations for the treatment of pseudoarthrosis with non-vascularized, pedicled vascularized, or free vascularized bone grafts.



Wrist reconstruction with Maestro prosthesis and bank bone graft in a rheumatoid patients (left). Pyrocardan prosthesis for osteoarthritis of 1st CMC joint (center). Wrist reconstruction with Re-motion prosthesis and MCP joint arthroplasty with SR prosthesis in a rheumatoid patient (right).

Congenital pseudoarthrosis of the radius treated with a free fibula bone graft. Preoperative view (left). Free fibula flap harvested (right).



Preoperative x-ray (left). One-month post-operative x-ray (below, right).



This scholarship was a fantastic opportunity to learn from several experienced hand surgeons, and see different approaches and techniques. Everyone was very helpful and did his/her best to make me feeling comfortable and provide maximal educational exposure. I was involved in all aspects of clinical activity, including operating theatre, outpatient clinics and scientific sessions.

It was one of the most successfully education visits in my hand training. I learnt several procedures that I will be able to perform back home; also, with the support and collaboration of the C.A.R.E center, we are moving steps forward to develop a tetrahand surgery service in Palermo.

I would like to thank the FESSH for allowing this unique educational opportunity and I would strongly recommend this visit to other young colleagues.

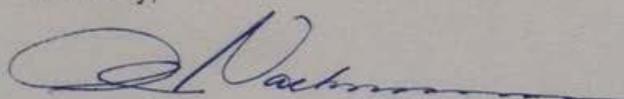
Department of Hand Surgery

To whom it may concern,

This is to certify that Francesca Toia, born 19.09.1983, has attended in surgery at the department of Hand surgery October 1st – December 31st, 2015.

Göteborg February 22, 2016

Sincerely,



Ann Nachemson
Chairman
Department of Hand Surgery
Sahlgrenska University Hospital
SE-413 45 Göteborg
Sweden