

History of Finnish Society for the Surgery of the Hand

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Beginning of modern hand surgery in Finland

The appointment of orthopaedic surgeon K. E. Kallio (1899-1986) as the Professor of Surgery at Helsinki University Hospital in 1950 can be considered as the starting point of modern hand surgery in Finland. He was an enthusiastic developer of different branches of surgery and a great advocate for the progression of hand surgery in Finland. He had created connections to international hand surgeons. Moreover, he directed Kauko Solonen (1921-2018) to specialize in hand surgical cases. Solonen visited several hand clinics in Western Europe and in the USA during 1950s and 1960s. The Hand Department started in 1963 and Solonen was appointed to be responsible for the unit and had two colleagues: Henry Brummer and George Bakalin.

In 1969 Solonen and Brummer moved to the Orthopaedic Hospital of the Invalid Foundation, in Helsinki and started there a new hand department. Solonen was particularly interested in elective microsurgery. Brummer (1923-2007) immersed himself in surgical management of spasticity and tetraplegia. According to Solonen especially Merle d'Aubigné, Dieter Buck-Gramcko, Erik Moberg, Hanno Millesi, Alfred B. Swanson and Claude Verdan personally promoted the development of Finnish hand surgery at that time. Solonen retired 1984 and Martti Vastamäki continued as the chief surgeon of the hand unit.

The third renowned surgeon of the era was professor Kauko Vainio (1913-1989), the head surgeon of Rheumatism Foundation Hospital, in Heinola. He was a pioneer of rheumatoid hand surgery developing new surgical techniques and trained multiple international fellows around the world, also from Far East. This enabled Vainio to help e.g. Simo Vilkki to visit several microsurgical centers in Japan and China.



Figure 1. Professor Kauko Solonen (1921-2018), the father of the modern Finnish hand surgery

Development of hand trauma and microsurgical service

Official education and training in hand surgery started in 1973 at the Orthopaedic Hospital of the Invalid Foundation, Helsinki. The first graduated hand surgeons obtained their positions in different university hospitals and new hand centers emerged: 1976 Simo Vilkki in Tampere University Hospital, 1979 Heikki Jaroma in Kuopio University Hospital and 1980 Timo Raatikainen in Oulu University Hospital. In 1999, hand unit started in Turku University Hospital run by Mark Rawlins and Veikko Viljanen.

Simo Vilkki started replantation service in Tampere and performed the first microsurgical replantation of a thumb in 1977. Later replantation service has been available also in Helsinki, Oulu, and Kuopio University Hospitals.

Current composition of the hand surgery service in Finland

Finland's health care system is founded on government-subsidized municipal health care services. In addition to the public sector, many private enterprises and non-governmental organizations provide services. There are 5 university hospitals in Finland and 16 central hospitals. Most of the hospitals have hand surgical service. Three of the university hospitals (Helsinki University Central Hospital, Oulu University Hospital, and Tampere University Hospital) are responsible for 24/7 emergency microsurgical hand service. Helsinki and Tampere University Hospitals are centers for advanced microsurgical reconstructions, the surgery of the brachial plexus, complex congenital hand anomalies and the tetraplegic hand.

Education

Hand surgery is an independent specialty in Finland, comparable to other specialties such as plastic surgery or orthopaedics. The duration of the specialization is at least 5 years, and determined by the evaluation of entrustable professional activities (EPA). The service includes at least one year active participation in a 24/7 hand-microsurgical emergency service. A written exam has to be passed in the end of the specialization to obtain the diploma.

Society

The Finnish Society for the Surgery of the Hand was officially registered in 1976. In 2020, Finnish Society for the Surgery of the Hand has 113 members.

Meetings and courses

The Society organizes three or four scientific meetings annually: The general assembly of the Society is held during the Operative Days that is a gathering of all surgeons and anesthesiologist in Finland. Embedded to this three-day meeting the Society has its own scientific sessions. International guests are usually invited to give keynote lectures. Wristmaster is another traditional meeting held every autumn. This informal meeting offers hand surgeons and residents an opportunity to meet and discuss about wrist surgery. Surgical Educational Center of Tampere University Hospital hosts one or two yearly hand-specific hands-on courses. During the last five years, the topics have covered flap reconstruction, ligament surgery, wrist arthroscopy, and tendon surgery. In addition, members of the Society at the Microsurgical Laboratory of Tampere University organizes basic microsurgical courses several times a year. The members of the Society take part in the meetings of Scandinavian, European, American, and other international societies for the surgery of the hand.



Figure 2. Participants of Ligamentmaster hands-on course in Tampere, Finland, in 2018.

International meetings in Finland

(The president of the meeting in parenthesis)

1988: Scandinavian Society for Surgery of the Hand, Turku (Martti Vastamäki)

1995: International Federation of Societies for Surgery of the Hand, Helsinki (Martti Vastamäki)

2000: Scandinavian Society for Surgery of the Hand, Kuopio (Heikki Jaroma)

2016: Scandinavian Society for Surgery of the Hand, Levi (Jorma Ryhänen)

Pioneers Finnish Pioneers of the International Federation of Societies for Surgery of the Hand

1986: Kauko Vainio

1992: Kauko Solonen

1995: Henry Brummer

2016: Martti Vastamäki

2016: Simo Vilkki

Academics

Käsikirurgia [Textbook of Hand Surgery in Finnish], Editors: Martti Vastamäki, Simo Vilkki, Timo Raatikainen, Timo Viljakka, Heikki Jaroma, Harry Göransson, Jorma Jokiranta. 648 pages, 1st edition, Duodecim 2000

Käsikirurgia [Textbook of Hand Surgery in Finnish], Editors: Martti Vastamäki, Harry Göransson, Jouni Havulinna, Tero Kotkansalo, Yrjänä Nietosvaara, Jorma Ryhänen, Simo Vilkki. 729 pages, 2nd edition, Kandidaattikustannus 2016

References

Kotkansalo T, Waris E. Hand surgery in Finland. J Hand Surg Eur Vol. 2017, 42: 653.

Solonen KA. Käsikirurgia [Hand Surgery], in book Suomen Kirurgiyhdistys 1925-2000 [Finnish Surgical Society 1925-2000], Editors: Tapani Havia, Arto Sivula, Pär Slätis; pp.267-284; Publisher: Gummerus Kirjapaino Oy 2000

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