

FESSH Hand Trauma Committee Audit of Tampere University Hospital in Finland

Massimo Corain¹, Guillaume Prunieres², Ignacio Roger de Oña³, Andrii Lysak^{4,5}

1) Hand Surgery Department, Verona University Hospital, Verona, Italy

2) Clinique saint François, Haguenau, France

3) Ruber International Hospital, Madrid, Spain

4) State Institution “National Institute of Traumatology and Orthopedics of National Academy of Medical Sciences of Ukraine”, Kyiv, Ukraine

5) State Institution “Main Medical Clinical Center of the Ministry of Internal Affairs of Ukraine”, Kyiv, Ukraine

Correspondence to: Andrii Lysak, State Institution “National Institute of Traumatology and Orthopedics of National Academy of Medical Sciences of Ukraine”, Kyiv, Ukraine

01601, Ukraine, Kyiv, Bulvarno-Kudriavska str., bld. 27

phone: +380 (95) 429-69-42

e-mail: dr.andrew.lysak@gmail.com

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Authors: Massimo Corain (massimo.corain@aovr.veneto.it), Guillaume Prunieres (guillaume.prunieres@orange.fr), Ignacio Roger de Oña (ignacioroger@gmail.com), Andrii Lysak (dr.andrew.lysak@gmail.com)

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39 **Abstract:** On May 9, 2025, the FESSH Hand Trauma Committee audited the Department of Hand
40 Surgery at Tampere University Hospital in Tampere, Finland, confirming the department's
41 recognition as a FESSH Hand Trauma and Replantation Centre.

42 On 9 May 2025, the FESSH Hand Trauma Committee conducted an audit at Tampere University
43 Hospital's Department of Hand Surgery in Tampere, Finland. This department already holds the
44 distinguished Hand Trauma and Replantation Centre designation, recognised by FESSH as a centre
45 of excellence. With Finland hosting the FESSH Congress 2025, the department is campaigning for
46 the renewal of this title.

47 Hand surgery is an independent speciality in Finland. It is responsible for caring for hand, wrist, and
48 forearm conditions, as well as treating peripheral nerve and brachial plexus injuries and diseases.

49 In the Tampere University Hospital, emergency doctors working within the emergency department
50 treat common, straightforward trauma patients. For all severe or complex upper extremity injuries,
51 they consult with a hand surgeon 24/7. All patients referred for surgery are examined personally by
52 a hand surgeon before any treatment decision. The population in the referral area for simple injuries
53 is approximately 300,000 (city area), for severe or complex injuries, about 1,000,000 (health district
54 area), and for emergency microsurgery, around 3,000,000 (covering 80% of the geographical area
55 and half of the country's total population).

56 At Tampere University Hospital, the Department of Hand Surgery collaborates with the
57 Departments of Orthopaedic and Trauma Surgery and Reconstructive Plastic Surgery as part of the
58 Musculoskeletal Diseases division. The division has 10 operating rooms, each dedicated to a
59 specific discipline. Each OR has equipment for all musculoskeletal surgeries. In addition, the
60 division has three microscopes that can be used in any OR.

61 The Hand Surgery Department comprises ten hand surgeons, including Camilla Hellevuo, the head
62 of the department, and Jarkko Jokihaara, a full professor of hand surgery, along with four hand
63 surgery residents. Four specialised hand therapists and six physiotherapists are available for the
64 upper extremity. The department's first emergency replantation took place in the 1970s, and the
65 24/7 emergency microsurgical service was established in the 1980s. The department's current
66 research projects focus on flexor tendon injuries, amputation injuries, nerve injuries, TFCC injuries,
67 distal radius fractures, metacarpal fractures, and frostbite injuries.

68 **Hand Trauma Committee members wanted to highlight the following solutions identified**
69 **during the audit:**

- 70 1. The department team organised a systematic timetable for hand trauma surgeries called
71 “hand line.” This schedule permits most injuries to be operated on within a few days during
72 office hours, reserving on-call operating time for the most severe hand trauma procedures.
- 73 2. Microsurgery can be trained in the department (as they have a special microscope for this),
74 the Vet.lab, which has six well-equipped sites, and the Cad.lab, which has eight well-
75 equipped dissection sites.
- 76 3. The department team develops simple mobile apps for common hand pathologies like carpal
77 tunnel syndrome. The apps provide recommendations about conservative treatment and
78 when the patient should contact a surgeon.
- 79 4. The Musculoskeletal Diseases division at Tampere University Hospital has a well-
80 established collaboration with the Musculoskeletal and Plastic Surgery division at Helsinki
81 University Hospital for treating rare trauma and upper limb conditions. For instance, when
82 brachial plexus surgery is performed in Tampere, a surgeon from the Helsinki team attends,
83 and vice versa – this offers both teams a valuable opportunity to enhance their knowledge of
84 managing complex cases.

85 The Department of Hand Surgery at Tampere University Hospital met all the requirements. The
86 FESSH Hand Trauma Committee confirmed that Tampere University Hospital is recognised as a
87 FESSH Hand Trauma and Replantation Centre.



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89 **Fig. 1.:** During the audit. From left to right: Andrii Lysak (HTC committee), Guillaume Prunieres
90 (HTC committee), Camilla Hellevuo (head of the department), Jarkko Jokihaara (full professor of
91 hand surgery), Ignacio Roger de Oña (HTC committee), Szilvia Schmidt (FESSH office), Olli
92 Leppänen (Tampere University Hospital), Massimo Corain (chair of the HTC committee).



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94 **Fig. 2.:** With the doctors of the department.