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DOI 10.1055/s-0033-1351278

Handchir Mikrochir Plast Chir 2013; 45: 323–325

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Rüdigerstraße 14
70469 Stuttgart
ISSN 0722-1819

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The French Initiated FESUM – Historical Development, Experience and Perspectives

Das Französische FESUM System – Historie, Erfahrungen und Perspektiven

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Key words

- FESUM
- Hand Trauma Center
- injury
- hand trauma
- network organization
- accreditation

Schlüsselwörter

- FESUM
- Hand Trauma Zentrum
- Verletzung
- Handtrauma
- Versorgungsnetzwerk
- Akkreditierung

received 03.06.2013

accepted 01.07.2013

Bibliography

DOI <http://dx.doi.org/10.1055/s-0033-1351278>
 Online-Publikation: 8.10.2013
 Handchir Mikrochir Plast Chir
 2013; 45: 323–325
 © Georg Thieme Verlag KG
 Stuttgart · New York
 ISSN 0722-1819

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Abstract

FESUM is an association dedicated to management, research and education of hand trauma. Created by surgeons in 1979, it is now accepted by the national and regional health administrations. The first goal of FESUM is to apply strict guidelines for specialized hand trauma centers. These guidelines are verified on site by 2 FESUM surgeons, and re-checked every 3 years. Patients are selected to be directed to the FESUM centers following very simple recommendations: every severe trauma must be addressed to and accepted by FESUM centers, 24/7. Seemingly less severe lesions such as deep palmar lacerations must also be systematically explored in FESUM centers to ensure patients have the best opportunity for treatment. Prevention is also a very important part of FESUM activities. The FESUM prevention campaigns are currently focused more specifically on daily life trauma, that represents 2/3 of the total injuries and is very poorly managed by authorities.

Zusammenfassung

Die FESUM ist eine Organisationsstruktur, die für die Versorgung, Forschung und Lehre von schweren Handverletzungen gegründet wurde. Ehemals gegründet 1979 von Chirurgen ist die Organisation mittlerweile von den nationalen und regionalen Gesundheitsbehörden anerkannt. Übergeordnetes Ziel der FESUM ist das Einhalten strikter Leitlinien an spezialisierten Hand Trauma Zentren. Die Richtlinien werden vor Ort von 2 Chirurgen überprüft und im weiteren Verlauf alle 3 Jahre erneut geprüft. Die Selektion der Patienten, welche einem FESUM Zentrum zugewiesen werden, ist recht einfach: Jede schwere Handverletzung muss einem FESUM Zentrum gemeldet werden und auch von einem solchen angenommen werden, und das zu jeder Tages- und Nachtzeit. Selbst mild erscheinende Handverletzungen, wie z.B. tief palmare Schnittwunden, müssen alle in einem FESUM Zentrum angeschaut werden, um zu gewährleisten, dass der Patient die besten Voraussetzungen einer Therapie erhält. Eine weitere wichtige Aufgabe der FESUM ist die Prävention von Handverletzungen. Derzeit liegt das Hauptaugenmerk der Präventionskampagnen auf der Vermeidung von Handverletzungen in Freizeit und Alltag, denn diese machen etwa 2/3 aller Handverletzungen aus.

Historical Background

Following the development of vascular microsurgery techniques in the 1960s, it became necessary to build a network of specialized centers able to perform replantations 24/7. In this spirit a group of pioneers including Prof. Michon, Dr. Merle, Dr. Foucher, Prof. Vilain, Prof. Lemerle, Dr. Saffar, Prof. Bureau, Dr. Magalon, Prof. Allieu, Prof. Alnot and Prof. Lejeune (Liège) created the CESUM [European Confederation of Emergency

Services (Main) of the Hand] on December 7th, 1979. In 1989, The CESUM became FESUM [1]. The bylaws of the FESUM have remained unchanged since 1989. Initially, the FESUM organization included most of the European countries. Unfortunately, despite the fact that it was very efficient in France, Belgium and Switzerland, it proved very difficult for non-French-speaking countries to continue cooperating within the FESUM for several reasons. The FESUM therefore remains active only in French-speaking



Fig. 1 This map shows the 49 FESUM centres in 2012. The red spots are public and the blue spots are private hospitals.

countries (France, Belgium, Switzerland and Luxembourg) but has been cooperating closely with the newly-created Hand Trauma Committee of the FESSH since 2005 [2].

In 2003, Philippe Bellemère and Yves Allieu added internal regulations to the bylaws because many university hospitals could not fulfill the accreditation guidelines. These internal regulations distinguished 3 categories of centers: The accredited centers, the associated centers and the centers working as a network without any accredited center.

Today, FESUM has matured, it is well known by the media when it comes to classify hospitals and clinics in France [3]. In 2013, The FESUM includes 54 centers, which is less than 1 center for a population of 1 million (▶ Fig. 1). The public to private ratio is 4/6. In several cities, public and private centers cooperate as a network. The National Academy of Medicine pleaded that the Ministry of Health include the concept of FESUM centers in their emergency network [4].

Current Organization

FESUM is chaired by a national board and 6 regional coordinators. The 6 members of the board and the 6 regional coordinators are renewed every 3 years, according to the FESUM bylaws. Every year, the General Assembly gathers all the FESUM members during the annual meeting of the French Society for Surgery of the Hand (GEM-SFCM) and votes on all new matters including the new centers applications.

Accreditation guidelines of the FESUM centers

The minimum requirements for center accreditation are: (i) 3 senior surgeons specialized in hand surgery and microsurgery, (ii) availability of the center 24/7, and (iii) at least 2 emergency cases operated in the theatre per day during the year before application.

Applications must be sent to the secretary general 6 months before the next following general assembly. If the organization of the center meets the FESUM guidelines, 2 FESUM surgeons are

nominated to visit and report on the center. The report is analyzed by the accreditation commission and the final decision is voted by the general assembly. Every new center receives an accreditation diploma for a 3-year period.

For centers with only 2 senior surgeons, it is possible to be accredited as an associated center affiliated to a fully accredited center.

Another possibility is that several centers with only 2 surgeons in each center cooperate forming a network.

Revalidation process

Every 3 years, all the data of the centers are re-checked. If a center does not meet the guidelines anymore, the center may be excluded from the FESUM or be subjected to a new evaluation visit.

Relations between FESUM and FESSH

The relations between FESSH and FESUM are very close. The accreditation guidelines are based on the same values of quality and availability requirements [2].

The main differences are that FESUM centers are visited physically by 2 FESUM surgeons so that the local processes, and surgical activity are verified more closely than through the HTC process that is exclusively an online application.

Conversely, HTC accreditation requires all the senior surgeons to be members of their national societies, and that at least one of the members to have passed the FESSH/UEMS board examination.

Only 23 FESUM centers are currently members of the FESSH HTC. An increased interest in European standards may develop in 2015 when the FESSH/UEMS board diploma becomes a due requirement.

Data Collection

In 2000 and 2002, 2 surveys [5,6] reported data collected at a national scale through the FESUM network. These data revealed that hand trauma in France is the first cause of work leave following a work accident representing 20% of all work accident absences. The incidence of hand trauma was evaluated at 2300 per 100000 inhabitants, which makes 1.4 million cases per year, 620000 of which result in work absence and/or sequel compensation. The financial burden is colossal, mainly because of compensation, which represents 80% of the total costs (paid leave off work and indemnity for sequel).

Epidemiological studies in Anglo-Saxon and Scandinavian countries often report an accident rate of 700–4000 for 100000 population per year. These figures are lower than those we observed in the FESUM network. The reasons could be because these studies recorded only very severe cases. In fact, many seemingly less serious cases are often treated in non-specialized peripheral hospitals. It has been shown that these seemingly benign lacerations may end up in heavy compensation when poorly treated [7]. The strategy of the FESUM, from the beginning, is to consider that every deep palmar laceration should be treated in a specialized hand trauma center. The reason is that clinical examination has been shown to be inadequate for deep lacerations in 30% of the cases and only a surgical exploration of the wound can give a complete diagnosis [8].

Hand Trauma Prevention by the FESUM

Philippe Bellemère played an important role in the development of hand trauma prevention. FESUM achieved several prevention campaigns including oral presentations in major companies and large-scale distribution of prevention leaflets to consumers and health professionals.

Jean-Claude Guimberteau set up a “National Campaign for the Prevention of Hand Trauma” which was launched in Paris in October 2010 and has successfully travelled in France through more than 15 cities ending in Paris in December 2013. These events were very successful in directing the attention of consumers and administration towards hand prevention in daily life [9].

Teaching mission of the FESUM

Most of the FESUM centers are involved in hand trauma surgery education [10]. University hospitals and some private centers are part of the university training program in hand surgery. Many foreign surgeons are also trained in public and private FESUM centers. The FESUM network also helps to devise clinical multicenter studies [11].

FESUM annual meeting

Every year since 2007, this meeting gives the opportunity for the FESUM surgeons to discuss administrative or organizational issues. A different city is chosen every year for the venue, this helps share local views and increases the community feeling inside the FESUM. These meetings have been so far held in Biarritz, Avignon, Lyon, Toulon, Chambord and Palavas-les-Flots.

Communication of FESUM

FESUM is now fairly well-known by the patients and the national and regional health administrations. Every year, the newspapers give a ranking of hand surgery centers where the FESUM label is promoted. Many newspapers and radio stations have reported on the FESUM.

The FESUM web site *fesum.fr* gives access to patients and professionals to consult the bylaws, the updated map of the centers and data regarding hand trauma including prevention. The web-site allows the patients to find the nearest hand trauma center.

Conclusion

FESUM is an original organization devised and organized by hand trauma surgeons. Because of continuous care to maintain self-discipline in the application of the rules, the FESUM is now respected by the national health administration in France. Cooperation with the Hand Trauma Committee of the FESSH is an important step in hand trauma organization.



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