

What makes a medical course a life experience

Patrizia Salvaterra

Scientific writer and journalist, the University of Milan

Day one, first impression

On one side, a group of motivated doctors - mainly orthopedic and trauma surgeons early in their professional career or with limited practice using external fixation devices - from eight different countries. On the other side, an international **outstanding faculty** of experts: a huge amount of clinical experience, different medical schools, various approaches, and diverse hospital organizations.

Last day, final impression

One highly integrated group of surgeons that has been able to create a perfect fusion through an open, generous exchange of medical knowledge and effective experience; maybe a readiness to engage in professional links and new, long-lasting friendships.

If this were the only outcome, it might be enough. Orthofix Global Medical Education Manager, **Elisa Luciani**, could honestly say that a significant task was achieved. *"I was really pleased to see how, over the three days, the atmosphere gradually changed: the participants became more relaxed and ready to join in and put questions to the experts. They shared their doubts and discussed controversial clinical cases in a relax atmosphere. For them, this course was a great opportunity to delve into the fundamentals of external fixation, mainly as a surgical technique and a therapeutic option, but also as an effective way of managing patients' most complex orthopedic problems,"* she commented.



Trying to understand what contributed most to the effectiveness of the course, one could identify some key content pillars and a set of other essential ingredients. The **teaching methodology**, for instance, is one such ingredient. Inspired by the learning pyramid, which recognizes the value of a good balance between listening and practicing, the course included frontal lectures and extensive hands-on experience, both in wet and dry labs. The possibility to work on real human specimens at ICLO Anatomical Laboratory was very well received by all participants. Another feature is the **high quality Orthofix facility**: the beauty of the newly renovated Orthofix Educational Centre at Orthofix Headquarter in Bussolengo (near Verona) greatly impressed the participants; a high tech conference room and the latest equipment enabled doctors to focus on their goals and, at the same time, made them feel comfortable and welcome.

What else?

Program was innovative and well designed. Three content **pillars**: principles of **biomechanics**, which reminded the participants of the value of always going back to the basics; full compliance with **indications**; the importance of mastering the **surgical technique**, following the right steps for a **safe and stable insertion of pins and wires**.

Amir Qureshi was the faculty chairman. He works as a consultant knee surgeon and limb reconstruction specialist at the University Hospital Southampton NHS Foundation Trust in Southampton, England. His intention as an honorary





In France surgeons prefer to use the hybrid device. Our goal is finding the best solution for the patient, irrespective of industry pressure," he explained.

Umberto Mezzadri works in the Orthopedics and Traumatology Department at the Grande Ospedale Metropolitano Niguarda, Milan, Italy. He explained that *"when treating polytrauma patients it is very important to perform what we know best, applying the surgical technique we are most familiar with in order to reduce the operation time and related risks. In polytrauma and DCO (Damage Control Orthopedics) we need to stabilize the fracture, and **external fixation may be a quick and safe solution**". He added: "Participants got the message that there is always more than one choice, and external fixation has broader indications than only being a temporary solution, instead it can be used as a definitive solution."*

senior clinical lecturer is not only to pass on his knowledge to his younger colleagues through evidence-based medicine: *"I tried to remind them that the **patient always comes first**. We should know everything regarding our patient, not only the anatomy, but also the physical and psychological profile, the family background, above all what the patient really wants and prefers in order to obtain her/his **full compliance**," he said. The well-known metaphor by G.R. Girdlestone of the surgeon as gardener who works on a living, growing and transforming bone, which, just like a plant, has its roots in the soft tissues, connected through the nervous and vascular systems, is particularly significant for an orthopedic surgeon: *"When the bone breaks, all the systems work to promote bone healing. Fracture healing is a physiological process and we as surgeons must help nature to restore the biological and mechanical properties of the bone as it was before the break,"* he stated.*

Mark Hanschen, orthopedic and trauma surgeon, is associate professor at Rechts der Isar University Clinic in Munich. He wished to comment on the course outcome: *"At the end of the course all participants, even the younger ones, had a better knowledge about the specific principles and techniques behind the **biomechanics of modular, monolateral and circular external fixation devices**, as they have a direct influence on bone stability and consequently on the whole bone's healing process". He added: "strength is that all participants could visualize their career as an expanding path in which Orthofix Academy is a reliable and supportive partner". The participants were able to test themselves in real clinical cases and review their decision making process with experts. He concluded: *"The course format was well structured, and as a faculty member I found my role very pleasant. It was rewarding seeing all the participants so actively involved during the entire course"*.*

According to **Nicola Tartaglia**, trauma surgeon in charge of the Orthopedics and Traumatology Department at the Regional Hospital F. Miulli in Acquaviva delle Fonti near Bari, *"an added value of the course was the **many different solutions** – often due to different medical schools – for the **same trauma case**. When I was in Sheffield (England), we mostly used the external circular frame. Back in Bari, we use the monolateral one more often.*

So, in the end, **learning objectives were achieved!** Participants learned how to **stabilize a complex fractures appropriately**, how to **assemble different frames correctly**, how to manage pelvic, diaphyseal and peri-articular fractures, using different techniques and types of constructs. While at the same time bearing in mind that the goal of orthopedic surgery is to achieve appropriate bone stabilization, promote bone healing, prevent or minimize complications. In short, to **improve the lives of patients**, as the Orthofix mission statement says.

Verona, March 5th, 2019

