

ITALIAN SAFETY IN SPINE SURGERY PROJECT – IS3P

Dear friends and colleagues,

The issue of safety and the reduction and management of complications in spinal pathology and surgery is increasingly emerging as a fundamental issue in the treatment of our patients.

The importance of the problem is confirmed by direct experience in our departments and clinics, where surgical revisions due to complications and patients with unsatisfactory results are increasing, and by the growing literature published on the topic over the past 10 years.

Data show complication rates in spinal surgery ranging between 2% and 70%, underscoring the still-rough estimate of the problem, linked to the lack of suitable and shared tools to correctly capture the problem.

Estimates in the North American literature suggest that approximately 60,000 patients suffer injuries during spinal surgery each year.

This does not include the so-called "Failed Back Surgery Syndrome (FBSS)," or patients with apparently successful operations but with poor clinical outcomes. The incidence of this syndrome, estimated in the literature at around 40%, is still significantly underestimated and should be included in the catalog of complications of our surgery, at least from the patient's perspective.

The advent of technologies such as navigation, robotics, and neurophysiology in the operating room and during the patient's diagnostic/therapeutic process has brought significant improvements in safety, but complication rates are not decreasing, demonstrating the need to address the problem more broadly and systematically, seeking new and innovative solutions.

Why create a scientific society dedicated to safety and complications in spinal surgery?

First and foremost, to raise awareness of the topic, not only among surgeons, but also among the entire team of people who work with patients with spinal pathologies (paramedics, companies, hospital administrators, companies, scientific societies, etc.); Even today, complications in our surgery are considered a negative but necessary consequence, accepted without seeking new solutions to improve it.

Professional and economic pressures dictate inappropriate interventions, without resorting to conservative therapies that are perhaps less effective but certainly less risky. This leads to complications and unsatisfactory results, as well as financial costs that burden the public sector and the private entities involved in this market. Data from settings where healthcare is predominantly privately funded has shown that an uncomplicated patient generates a profit of around 6%, while a complicated patient eliminates profits or generates additional, sometimes exorbitant, costs (major complications). For this reason, government and private entities have invested heavily in hospital facilities on programs aimed at increasing safety and reducing complications in spinal surgery, achieving significant financial results as well.

For this reason, together with other colleagues, we have decided to found a scientific society dedicated entirely to safety in spinal surgery.

The mission of this society will be primarily to raise awareness of this still underestimated issue among spine surgeons and all healthcare and non-healthcare personnel involved in the management of our patients, seeking new solutions that can increase safety and reduce complications in spine surgery, with the future goal of "0 (zero) complications."

A meeting will be organized at a frequency to be determined, in addition to various initiatives (webinars, interviews, multimedia content, documentation, and other resources), in collaboration with the Safety in Spine Surgery Project (S3P) <https://safetyinspinesurgery.com/>, founded by Michael Vitale in 2015 together with some of the leading experts in our field, who have been dedicated to this particular topic for 10 years.

Mission:

- We will adapt the technical skills (already very high in our country) of surgeons and all staff working with patients to a focus on safety and avoiding complications.
- We will introduce and study the contribution of non-technical skills (planning, teamwork, checklists, briefings, debriefings, audits, patient information, etc.), which have already proven essential in increasing safety and quality in aviation and the heavy mechanical engineering industry.
- We will meticulously, almost fanatically, search for the precise point in the patient's diagnostic and therapeutic process, the moments and places where errors leading to complications occur.
- We will collaborate with supplier companies to develop improved technologies and processes dedicated to patient safety.
- We will train new professionals (not yet present in our healthcare system) dedicated exclusively to safety and quality, who will work closely, day after day, with the healthcare staff working with patients. We have called them "safety managers"... the doctors and staff healthcare professionals don't have the time to focus on safety...

What we hope for (vision):

- Our vision is to become the national reference point for spinal safety, actively contributing to the creation of a safer, more informed, and more efficient healthcare system. We envision a future in which every spinal procedure is performed in compliance with the highest safety standards, thanks to a solid network of trained professionals, well-prepared facilities, and clinical decisions guided by data and evidence. And, in the future, a team exclusively dedicated to safety.
- By sharing experiences, analyzing errors, and promoting innovation, we want to foster a lasting cultural change that puts patient safety first.

We also hope to be able to fund research projects on this topic in the future.

I warmly invite you to express your consent to participate in this new scientific research group by joining the society and actively collaborating on its mission.

Giovanni Barbanti Brodano