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Letter to the Editor

# Let's talk about complications

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Dear Editor.

#### INTRODUCTION

The term "surgical complication" is a broad umbrella covering a large spectrum of postoperative challenges. Crucially, the patient's experience of a complication may not align with the caregiver's perception: while overt issues like infections and hematomas fall within its purview, the scope can extend to subtler changes, including short- and long-term cognitive disturbances, emotional control disorders, changes in sleep quality, fatigue, pain, and shifts in mood. [4,7,11,14,16,17]

#### PATIENT'S EXPERIENCE OF COMPLICATIONS

Hospitalization for neurosurgery is inherently anxiety-inducing for patients, given the profound impact such surgeries can have on the brain and spine, the epicenters of consciousness, and neurological autonomy. The addition of a complication amplifies this anxiety, not only for the patient but also for the neurosurgeon. In our practice, neurosurgical complications often become a catalyst for psychological support after surgery, underscoring the need for a nuanced approach to patient care.<sup>[5]</sup>

The preoperative consultation emerges as a critical juncture, setting the tone for the patient's journey. It is more than a platform for discussing procedural details; it becomes the foundation for trust-building between the patient and the surgeon. Effective communication during this phase empowers patients to participate actively in their care and fosters psychological preparedness for potential complications. The consultation becomes an arena for addressing uncertainties, requiring the surgeon's temporal dedication and psychological availability. [5,9]

During the postoperative phase, announcing a complication to a patient is a skill that goes beyond delivering clinical information. It involves a delicate blend of clear, accessible language and empathetic support. The surgeon's nonverbal cues are crucial in conveying transparency and a genuine listening predisposition. Expressing sincere empathy becomes a powerful tool in alleviating the patient's feelings of anger and injustice ("I'm truly sorry this happened to you"), initiating the process of reconstruction. [13] Complications can profoundly affect a patient's quality of life, especially if they result in irreversible changes. The surgeon, equipped with clinical expertise, must also provide and request appropriate psychosocial support during the complication announcement meeting, both for the patients and the doctors themselves.

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#### SURGEON'S EXPERIENCE OF COMPLICATIONS

Complications in neurosurgery, regardless of severity, present a common challenge: how does a surgeon navigate the intricate terrain of empathy and clinical detachment? The delicate balance between acknowledging the patient's suffering and maintaining professional composure is a tightrope walk that requires meticulous skill. In this context, two potential pitfalls lie in the extremes of over-investment under-investment. Nevertheless, complication management is crucial. It involves regularly communicating with patients and relatives, being present daily, and maintaining an open line of communication to address complications, even those beyond our control.

The term "second victim" is introduced to emphasize that the silence surrounding complications can be as detrimental to the surgeon's well-being as the complication itself.<sup>[8,18]</sup> Western societal values often glorify success, creating a dichotomy in the perception of surgical outcomes. Surgeons, stereotypically characterized by high levels of narcissism [3], further complicate the acceptance of complications, which may be seen as a personal failure in contrast to a successful surgery.

Neurosurgical complications rank among the most morbid, leading to outcomes such as hemiplegia, cognitive disorders, loss of autonomy, tetra/paraplegia, and even death. [6] The burden of complications, if internalized by the surgeon without a constructive resolution, can accumulate and adversely affect the quality of care provided to subsequent patients.

Surgical complications are, however, tangible and welldocumented. Procedures are recorded with precise surgical times, supplemented by videos or images, and are witnessed by medical staff. This level of documentation provides a clear advantage, especially during debriefings - a practice that should be universally implemented - to understand and analyze complications thoroughly. Yet, there is a contrasting challenge: surgeries are often scrutinized as standalone interventions, and postoperative sequels are therefore considered as logical, direct consequences of the surgical procedure. Other treatment modalities, such as chemotherapy or radiation, are not as meticulously documented or highlighted when complications arise. This discrepancy can skew the overall assessment of treatment-related outcomes.

The medicolegal landscape further complicates the issue, with defensive medicine becoming more prevalent. Fear of litigation and the potential impact on one's professional reputation can dissuade surgeons from publishing rare complications. Furthermore, the under-reporting of complications in medical literature contributes to a culture of silence and reluctance to discuss complications openly.<sup>[15]</sup> Anonymously reporting such events could offer a middle ground, facilitating knowledge sharing without fearing personal repercussions. Alleviating shame surrounding publicizing complications and implementing a prospective anonymous reporting system could be instrumental in creating a culture of openness.[1]

Finally, surgeons are often expected to cope with complications independently. The current system lacks structured professional psychological support, a gap that can be especially harmful to younger staff, potentially leading to trauma and long-term emotional distress.

### PERSPECTIVES ON COMPLICATIONS IN **NEUROSURGERY**

In the context of surgery, failure is a complex and often troublesome aspect for both trainees and established practitioners. [2,10] The pursuit of perfection remains a common thread throughout the professional journey of students, residents, and neurosurgeons. Uncertainty pervades surgical interventions; through rigorous training and simulation, neurosurgeons can minimize stochastic effects and randomness.[2] However, understanding failure as an integral part of learning is crucial. Rather than viewing a complication as a failure, neurosurgeons should consider it an opportunity for introspection and improvement. Investigating the root causes of complications becomes a pathway to enhance the surgical process and minimize the risk of recurrence. While acknowledging the role of randomness in rare complications, an unwavering commitment to scrutinizing external factors is essential for sustained progress. [2,12]

#### **CONCLUSION**

Fulfilling a culture where failures and errors are discussed openly is imperative. Aside from the technical aspects of neurosurgical procedures, the training of neurosurgeons should incorporate dedicated segments on navigating successes and complications. Encouraging benevolent collegial discussions surrounding cases with complications can provide a supportive environment for shared learning and emotional processing. In addition, establishing a platform for the anonymous publication of rare complications and a systematic reporting registry could revolutionize the discourse around neurosurgical complications.

As complications sessions are among the most interesting sessions in congresses, we pledge to open a dedicated section on complications in neurosurgical journals addressing the patient's and surgeon's perspectives.

Favorizing analysis and publications of complications, neurosurgeons can collectively contribute to a culture of continuous improvement, ensuring the delivery of the highest standard of care while prioritizing the well-being of both patients and practitioners.

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