Editorial

Patient reported outcomes in thoracic trauma—lesson learned from thoracic oncology

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Keywords: Patient reported outcomes; thoracic trauma; thoracic oncology

Submitted Apr 06, 2023. Accepted Jul 10, 2023. Published online Jul 26, 2023.
doi: 10.21037/jtd-23-576
View this article at: https://dx.doi.org/10.21037/jtd-23-576

There are many aspects of practice in medicine and surgery that require extensive collaboration between colleagues of different disciplines in order to progress the care of our patients. Thoracic trauma is one of these areas—care is not planned, is frequently non operative and positive progress depends on strong interdisciplinary working embracing the role of allied health professionals. Often the best place to understand an issue is by raising it—to gather interest and opinion and to structure a plan forward.

As thoracic surgeons we are increasingly familiar with patients enquiring about how quickly they might recover following elective surgery. It is, of course, important to ensure that the full landscape is clearly outlined when discussing the 'surgical pathway' for example in lung cancer surgery—the intended benefits, the risks and the alternatives. We often share with patient's the risks of major complications including that of mortality and it is not uncommon for this to be offered as a percentage or a number. This is, and will always, be important for patients. However, there is perhaps now more emphasis from our patients on factors we may not have traditionally considered as such including how much time they may need off work or away from routine daily activities. It may even be that these factors might bear the greatest influence on which treatment modality is chosen by a patient rather than the factors we might consider more important such as 30- and 90-day mortality or 5-year survival rates. Over the last few years, having recognised patient concerns, there is increasing importance associated with patient reported outcome measures (PROMs) in thoracic surgery and it is our opinion that this should be as heavily reflected in outcomes for patients who have suffered thoracic trauma.

Chest trauma and surgery do, of course, share some similarities—they can cause the same complications including respiratory failure, pain and mortality and can have long term, 'life changing' impact. However, one major difference is the completely unplanned nature of trauma. It has to be recognised that the huge and often sudden disruption it causes to a patient's life. They will have had no warning or time to consider options that are available. They will not have been proposed any procedure or any time to go through an informed consent. The pathway is not chosen and so all that follows is unpredictable. The young parent driving to work who is involved in a major road traffic collision. They sustain injuries including several rib fractures requiring admission to hospital. As surgeons we will review this patient—looking for signs of respiratory comprise, worsening pain or a flail chest. These are things that we will use to guide our management—things that we do with a view to minimising the risk of mortality or the

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time spent requiring respiratory support—clearly critical and fundamental and should remain so. For the patient laying in the bed, they will almost certainly be worrying about other aspects that we do not normally consider—disruption to their family life, loss of their job or income, who will be looking after their children. Whilst these are ultimately all related and it can be argued increased time on a ventilator may contribute to increased disruption in family and work life it is important to understand each and how they relate in a bid to ultimately optimise outcomes. It cannot be assumed, for instance, that it is actually the chest trauma that leads to longer term adverse outcomes—it could be psychological trauma with stress and fear clearly important factors.

Over the last few years there are those who have and are approaching PROMs in thoracic trauma. The Operative Rib Fixation (ORiF) study, a multicentre randomised controlled trial based in the United Kingdom investigating Surgical Stabilization of Rib fractures (SSRF) (1). One of the secondary objectives is to assess patient reported pain and function over 12 months. Baker *et al.* (2) undertook a study investigating health related quality of life and emphasised the need that long term outcomes such as functioning and chronic pain are not underestimated. The young patient who is unable to return to work is clearly of importance to society. Other authors have reported the massive effect on patients' daily lifestyle of chest trauma (3,4). A recognised and validated PROM is of clear benefit to the wider community caring for patients who have suffered chest trauma.

Rib fractures, and chest trauma more generally, are prevalent and continue to be of interest and importance to the thoracic surgeon. It is important, for example, to continue researching and refining the indications for SSRF. Thoracic trauma care is not always operative and more frequently than not it isn't. We would particularly emphasize the ongoing need for focus on the non-operative aspects of care. Thoracic surgery may often be the admitting specialty and as surgeons we tend to focus on the things we are used to. We may proceed to surgical intervention but the recovery continues long after this. Given our involvement it is incumbent on us to ensure we continue to refine the whole package of care the patient needs—with PROMs a tool to help with this. One example is the increased recognition of multi-disciplinary working with psychology input more frequently occurring and clearly of likely benefit. Indeed, societies representing specialties and memberships that are frequently involved in the management of thoracic trauma have a role to play. Given the heterogeneity of the chest trauma population and lack of trauma specific questionnaires, it is perhaps even more relevant that there is collaboration between different specialities and societies to address the area of PROMs in thoracic trauma.

It is our feeling that the initial step in addressing patient reported outcomes in thoracic trauma is by raise awareness of potential benefit of understanding and monitoring with standardized measures in patients outcomes and to encourage interested colleagues to do likewise. As with more objective clinical outcomes, it will be crucial to gain greater understanding of thoracic trauma provision and care generally and understand the role that PROMs may or may not have in this currently. Given the interdisciplinary working the involvement of societies representing different stakeholders including surgeons, anaesthetists and allied health professional groups will be critical in gaining a clear insight in this area.

Acknowledgments

Funding: None.

Footnote

Provenance and Peer Review: This article was commissioned by the editorial office, *Journal of Thoracic Disease*. The article has undergone external peer review.

Peer Review File: Available at https://jtd.amegroups.com/article/view/10.21037/jtd-23-576/prf

Conflicts of Interest: All authors have completed the ICMJE uniform disclosure form (available at https://jtd.amegroups.com/article/view/10.21037/jtd-23-576/coif). AB serves as an unpaid editorial board member of *Journal of Thoracic Disease* from April 2022 to March 2024. CP serves as an unpaid editorial board member of *Journal of Thoracic Disease* from October 2022 to September 2024. AB reports consulting Fees and payment or honoraria for lectures, presentations, speaker's bureaus, manuscript writing or educational events with Astra Zeneca, MSD, BMS and Ethicon and is a member of the Board of Directors of ESTS and STS. CP reports consulting fees for Astra Zeneca and Medela. The other authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all

aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Cite this article as: Gooseman MR, Cowen ME, Tentzeris V, Qadri SSA, Brunelli A, Pompili C. Patient reported outcomes in thoracic trauma—lesson learned from thoracic oncology. J Thorac Dis 2023;15(8):4151-4153. doi: 10.21037/jtd-23-576

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