Title of Presentation
Return to activity recommendations and standard care following surgical stabilisation of rib fractures: A survey of surgeons’ practice patterns and perspectives

Background
Current literature highlights a need for improved patient education, rehabilitation and follow-up to optimise outcomes after surgical stabilisation of rib fractures [SSRF]. Negative impacts on work, physical activity participation, and quality of life can persist up to 3 years post-SSRF. Clinical practice guidelines endorse post-operative protocols and outpatient surgeon follow-up as standard care, however the current state of practice among surgeons is unknown. This study sought to investigate surgeons’ practice patterns and perspectives regarding post-operative recommendations and care for patients following SSRF.

Methods
A custom online survey was developed, targeting surgeons who had performed at least 5 SSRF procedures within the last 2 years. Survey items covered demographics, practice patterns (activity recommendations; standard care), and perspectives (activity recommendations; outpatient follow-up). The survey was pilot tested for content validity, then distributed to members of the ANZAST and ANZSCTS. Response data were analysed using descriptive statistics.

Results
The survey received 34 responses, of which 20 were eligible for analysis. Most respondents specialised in cardiac and/or thoracic surgery (80%), and 45% had performed >20 SSRF procedures in the last 2 years. Provision of return to activity recommendations was reported by 85% of surgeons. Only 45% were specific to SSRF, despite 90% of surgeons agreeing that this should be standard practice. Written recommendations were reported by 41% of surgeons, yet 70% agreed that this should occur.
Information included in surgeons’ recommendations varied. Advice about upper limb weightbearing was most common (71%). Fewer surgeons reported giving guidance about recommencing work (18-41%). Suggested timeframes for returning to physical and functional activities were inconsistent, often spanning a 6-8-week window. Although no surgeons supported a non-weightbearing upper limb, there was substantial variability in recommended weightbearing limits from 0-12-weeks post-SSRF. After 12-weeks, 95% of surgeons supported weightbearing as tolerated. All surgeons rated personal experience and/or preference, along with knowledge of tissue healing timeframes, as moderate-strong influences on their return to activity recommendations.

Surgeons’ practice regarding standard care varied. Outpatient surgeon follow-up was most frequently reported (90%), while referrals to outpatient physiotherapy (10%) or multidisciplinary clinics (5%) were uncommon. In contrast, 65% of surgeons agreed that patients should be routinely referred for outpatient physiotherapy and 60% believed referral would be feasible. Fewer surgeons agreed this would be accepted as standard practice (45%). Surgeons were less supportive of multidisciplinary clinic follow-up (45%), with lower agreement that this would be feasible (30%) or accepted as standard practice (35%). Only 25% of surgeons reported routinely using thoracic and/or upper limb rehabilitation protocols. However, 95% agreed that further research into rehabilitation for patients post-SSRF is warranted.

**Conclusion**

This study is the first to describe surgeons’ practice patterns and perspectives regarding return to activity recommendations and standard care for patients following SSRF. The findings highlight variability in the type of information included in current recommendations and what constitutes standard care. Inconsistencies were observed in surgeons’ perspectives on weightbearing limits and timeframes for recommencing usual activities. Further research is warranted to establish international practice benchmarks, and to investigate optimisation of post-operative recommendations and care.