OPTIMAL TIMING FOR RANGE OF MOTION TO UPPER EXTREMITIES FOLLOWING SPLIT THICKNESS SKIN GRAFT: A FIVE-YEAR RETROSPECTIVE REVIEW

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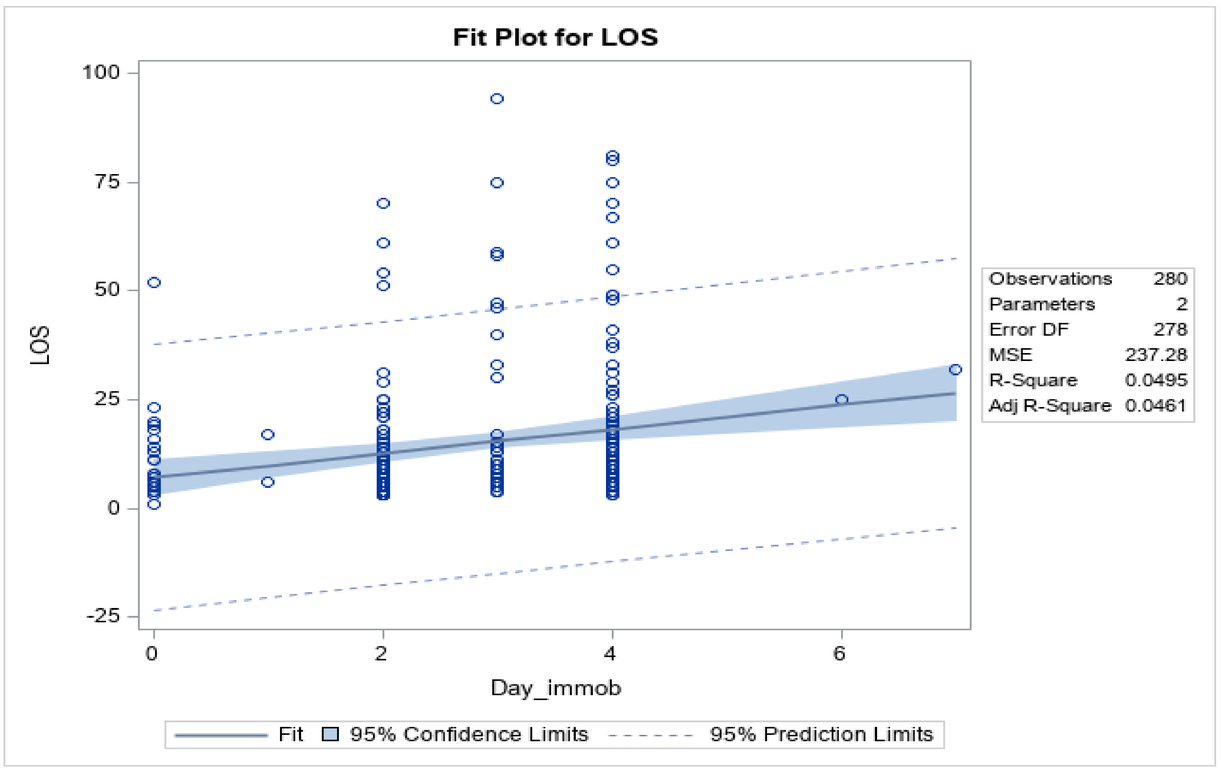
Conclusion

Decreased immobilization following autografting did not increase graft loss but did decrease length of stay

Effect of Immobilization on LOS

Parameter Estimates

Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	Intercept	1	7.00807	2.14643	3.26	0.0012
Day_immob	Day_immob	1	2.78777	0.73269	3.8	0.0002



Effects of complications on LOS

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits	
LOS	1.079	1.053	1.105

Significance Statement

A thorough review of existing literature failed to reveal any studies examining the optimal timing for immobility following the placement of split thickness skin graft (STSG) to the upper extremity and the implications for functional independence.

Population and Results

A retrospective review was conducted for all adult burn-injured inpatients ages ≥ 18 who underwent STSG to the upper extremity from January 1, 2014 - January 1, 2019.

- Practice changes led to a decrease in days immobilized from 4 days to 2 days
- STSG complications did not increase as a result of decreasing the duration of immobilization
- Each day mobilization was delayed increased requirement for:
  - Moderate assistance with upper body dressing by 44%
  - Minimum assistance with toileting by 45%
- Each increase day in LOS increased a patient's odds of having STSG complications by 7.9%

Lessons Learned

Decreasing post surgical immobilization of the upper extremity from 4 days to 2 days decreased LOS and increased functional ADL abilities without increasing complications.

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