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Objective: Upon completion of the lecture, attendees should be better prepared to:
▪ Recognize decreased post-operative narcotic usage, lower cardio-pulmonary complications, early rehabilitation and potential improvement in survival.

Introduction: Burn related mortality and complication rates are more pronounced in the elderly patient population. General anesthesia along with endotracheal intubation has been associated with an increase in peri-operative complications and mortality. Regional anesthesia has shown to improve peri-operative outcomes in the non-burn geriatric population. The purpose of our study is to suggest a possible decrease in complications and improvement in survival using regional anesthetic techniques in burn patients.

Methods: This study was a retrospective, electronic medical record review. Patients included received either epidural, spinal, peripheral nerve blocks or a combination of these. They remained awake and responsive during surgery. Patients were followed by the acute pain service. Several perioperative parameters were assessed including patient's comorbidities, preop ASA class, Baux score, number of surgeries, duration of surgery, duration of anesthesia, post op complications, narcotic requirements, graft take, rehabilitation, length of stay, disposition, follow up and survival.

Abstract: **Results:** Three patients were evaluated with an age range of 72-88. Average TBSA was 12% with a mean Baux score of 91. All patients had significant medical co-morbidities including congestive heart failure and hypertension. Two individuals had an automated implantable cardioverter defibrillator (AICD) of which one individual had an ejection fraction of 18%. Two patients had chronic kidney disease. ASA classification was greater than 3. Two patients received a combination of epidural, spinal and peripheral nerve anesthesia for bilateral upper extremities. One individual received a peripheral nerve block to the left lower extremity. One individual's surgery was staged due to incomplete peripheral analgesia. All the patient's survived. Average duration of surgery and anesthesia were 114 mins and 152 mins respectively. Graft take was 95% in all individuals. There were no post-operative complications. Opioid requirements were significantly reduced when comparing pre and post block morphine milligram equivalents (21.6 vs. 3.5 MME/day). Patients were engaged with burn rehabilitation on post-operative day 1. Ambulation began on post-operative day 3. Average duration of stay post-surgery was 8.5 days. Two patients were discharged to a rehabilitation unit and one to a long term acute care facility.

Conclusions: Regional anesthetic techniques offer a viable alternative to general anesthesia in the elderly population with significant co-morbidities. Our selective case series demonstrate a beneficial role of regional anesthesia with no post-operative complications and complete survival.

References and Resources:

Does regional anesthesia really improve outcome?

S. C. Kettner H. Willschke P. Marhofer

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Disclosure:

S. Ram Velamuri – No Relevant Financial Relationships to Disclose

William L. Hickerson – Stock: PermeaDerm, PolyNovo; Honorarium: PolyNovo, Vericel, Avita, MedLine

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