Pain scores with atypical pain regimens in severe burn

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Background

- Severely burned patients receive a variety of medications to alleviate their pain.
- We wondered if there are differences in reported pain scores and acceptable pain levels between burn patients who receive opioid analgesics and patients who receive additional non-opioids that are atypical in most pain regimens.

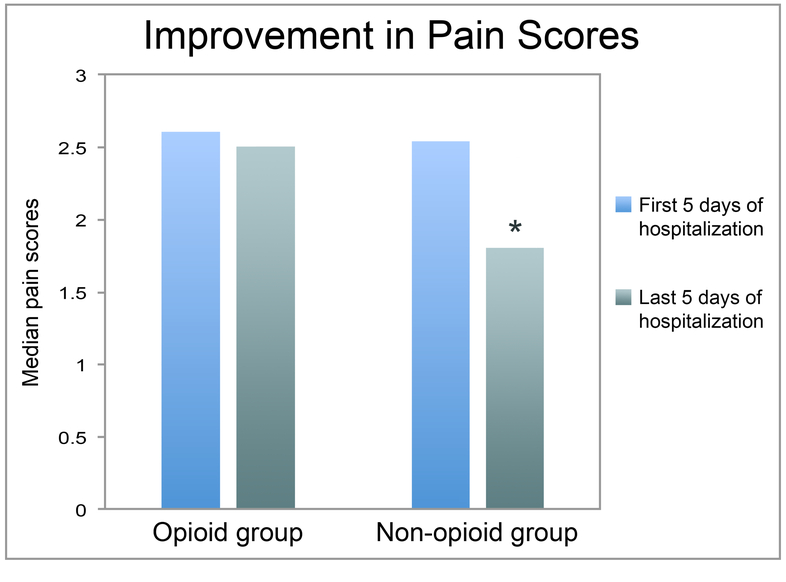
Methods

- The regional burn center's database was queried for subjects with >20% total body surface area (TBSA) burn.
- Subjects were categorized into those who received opioid pain medications and those who received additional non-opioid medications.
- Non-opioids considered were typical and atypical antipsychotics, benzodiazepines, SSRIs, and heterocyclic antidepressants.
- Cohorts were matched by TBSA burn, age, and gender.
- Pain scores and acceptable levels of pain from the first five days of hospitalization were compared to those from the last five days of hospitalization.

Results

	Opioid group	Non-opioid group	p value
n	28	28	
Median TBSA burn	28%	25%	0.440
Median length of hospitalization	31 days	20.5 days	0.313
Mean age	42.2 years	42.4 years	0.957

- There was no statistical difference in TBSA burn, gender, age, or length of hospitalization between the two groups.
- We found no differences in pain scores or acceptable pain levels between groups at either time points.



- Paired t-test demonstrated no statistical change in pain scores over hospitalization in the opioid group.
- However, subjects who received non-opioid pain medications had a statistical improvement ($p = 0.018$) in pain scores over their hospitalization from 2.5 (1.6, 3.9 [IQR]) in the beginning to 1.8 (1.2, 2.5 [IQR]) at the end.
- There was no statistical difference in the subjects' acceptable pain levels over hospitalization in either group.

Conclusions

- Our results suggest improved pain scores with atypical pain regimens compared to opioid-only treatments.
- Anxiolytics, antipsychotics, and antidepressants should be considered in pain regimens after severe burn.

Acknowledgements

- UT Southwestern Medical Student Research Program
- Department of Surgery, UTSW
- The work was supported by NIH (award #T32GM008593)