INTRODUCTION

- Basilar skull fractures (BSFs) comprise 19-21% of all skull fractures, typically in conjunction with intracranial trauma.
- To date, no analysis has been conducted on whether the rate of traumatic etiologies or feared complications (cerebrospinal fluid [CSF] leak, meningitis, and traumatic cranial nerve palsy) differs by demographic group.
- Thus, the purpose of this study was to identify socioeconomic correlates with various BSF etiologies and complications.

METHODS

- The 2015-2016 Nationwide Inpatient Sample (NIS) was queried for patients with BSFs.
- Patients were segregated by age, sex, race/ethnicity, income, insurance status, and hometown urban-rural classification.
- Endpoints included etiology, CSF leak, meningitis, hearing loss, and post-traumatic facial nerve palsy.
- The association of demographics with these endpoints was evaluated using Chi-square tests for significance.

RESULTS

CONCLUSION

- Motor vehicle accidents (MVAs) were the most common etiologies of BSF in the general population.
- Falls were the most common cause among children and the elderly.
- Adolescents (10-19 years) presented most commonly following MVAs.
- Men suffered from higher impact etiologies such as MVAs and assaults (P<0.001) relative to women.
- African-Americans and Native Americans were disproportionately affected by assault.
- Lower socioeconomic status was associated with assault and MVAs as mechanisms of injury.

REFERENCES