

# LE FORTE FRACTURES: MODERN TRENDS

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## Introduction

Le Forte fractures account for 15-30% of all maxillofacial fractures, this has a significant impact on the acute morbidity of facial trauma as well as the perpetuating effects of facial disfigurement. This study aimed to provide patient characteristics and short-term (30 days) clinical outcomes of Le Forte fractures and reconstruction.

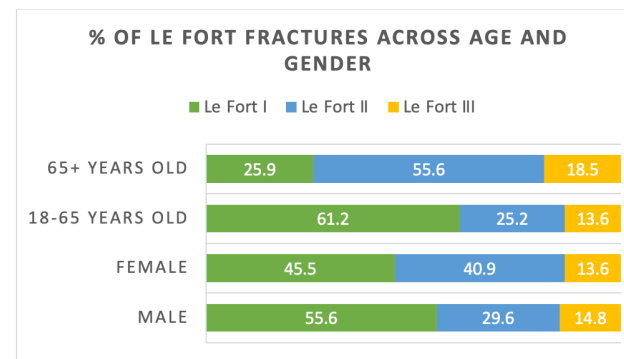
## Methods

We used the NSQIP database from 2016-2019, cases with Le Forte fractures were identified by ICD-10 code. We excluded patients under 18 years old and those who underwent elective surgeries. We evaluated patient characteristics and outcomes. Outcomes included the occurrence of in-hospital complications, hospital length of stay (LOS), readmission rates, and reoperation rates. All descriptive statistical analyses were performed using SPSS.

## Results

Over 4 years, we identified 130 (3.95%) cases of Le Forte fractures from 3,293 facial fractures. 53.8% (70) of patients were diagnosed with Le Forte I, 31.5% (41) of patients with Le Forte II, and 14.6% (19) of patients with Le Forte III. The male-to-female ratio was 4.9 : 1 (108 : 22). The mean age of patients was 48.22 ± 18.9 years. Most patients underwent facial reconstruction surgery within the first 3 days of admission (95.4%), and 83.8% of patients were discharged in less than 3 days post operatively. During hospitalization, 5.4% (7) of patients had complications. Only 1.5% (2) of patients were readmitted for sepsis related to the facial fractures and SSI, while 2.3% (3) underwent reoperation for debridement.

Table 1. Percentage of Le Forte fractures across age and gender.



## Conclusions

Patients with Le Forte fractures were most often adult males (18-65 years old), presenting with a Le forte I fracture. In relationship to previous published data, our study showed less incidence of zygomatico-maxillary fractures compared to other facial fractures, accounting for only 3.95%. Our study also demonstrates a low incidence of isolated midface fracture-related morbidity 5.4% and 0% mortality.

## References

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Table 2. 30-day outcomes of Le Forte fracture repairs.

Outcomes	All fractures (%) N = 130
<b>All complications</b>	
Yes	7 (5.4%)
No	123 (94.6%)
<b>Superficial-deep incisional SSI</b>	
Yes	4 (3.1%)
No	126 (96.9%)
<b>Sepsis</b>	
Yes	1 (0.8%)
No	129 (99.2%)
<b>Wound disruption</b>	
Yes	2 (1.5%)
No	128 (98.5%)
<b>Hospital length of stay</b>	
<3 days	109 (83.8%)
>3 days	21 (16.2%)
<b>Reoperation</b>	
Yes	3 (2.3%)
No	127 (97.7%)
<b>Readmission</b>	
Yes	2 (1.5%)
No	128 (98.5%)