

Presentation and Management of Ballistic Mandible Fractures

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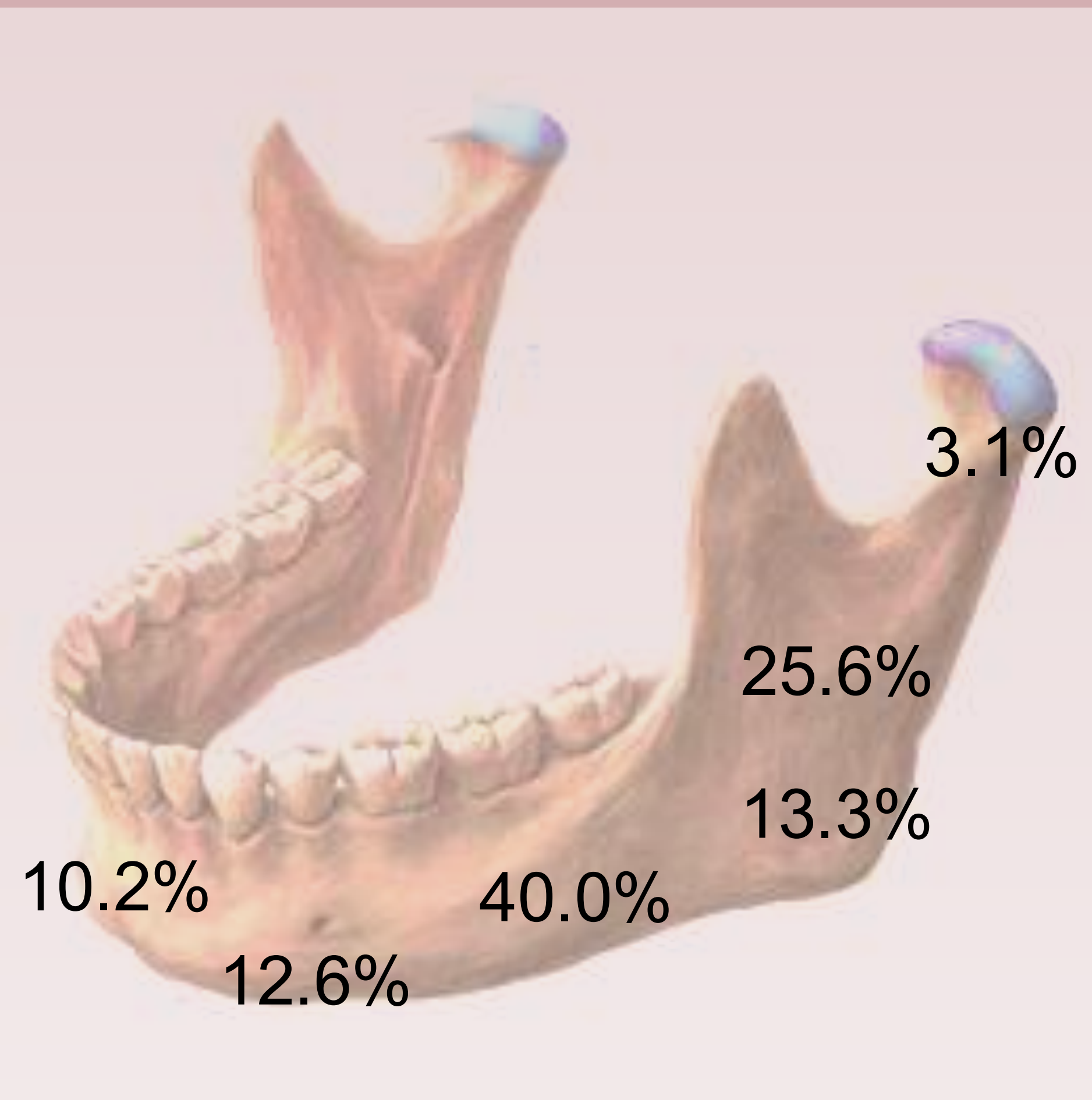
Mandible Fractures

- Second most common after nasal bone fractures
- Typically secondary to blunt mechanisms
- Fractures due to ballistic injury have not been well studied

Study Design

- Retrospective
- Single Level 1 Trauma Center
- July, 2018 to April, 2020
- Both isolated mandibular injury and in conjunction with other injuries included

Patients, n=90	
Age, years	29.3 ± 13.2
Male	74, 82.2%
Mechanism	
- Assault	82, 91.1%
- Self inflicted	6, 6.7%
- Accidental	2, 2.2%



Patients, n=90	
Airway	
- Intubated on scene	68, 75.6%
- Required tracheostomy	34, 37.8%
Emergency intervention	
- Operating room	14, 15.6%
- Interventional radiology	8, 8.9%
Operative fixation (n, %)	67, 74.4%

Operative Patients, n=67	
ORIF	48, 71.6%
Bone grafts	16, 23.9%
MMF	45, 67.2.%
Free flap	3, 3.3%
- Operating room	14, 15.6%
- Interventional radiology	8, 8.9%
Operative fixation (n, %)	67, 74.4%

Operative Patients, n=67	
Overall complication	14 (15.6%)
Wound healing	2, 2.2%
Infection	6, 6.7%
Exposed hardware	3, 3.3%
Malunion	3, 3.3%
Death	6, 6.7%

Conclusions

- Ballistic mandible fractures present unique challenges to the reconstructive surgeon
- Assessment and priority of clinical stability, especially airway concerns
- Limited in retrospective nature, inconsistent follow up