

THE TRAUMA WHIPPLE: A RARE BUT SURVIVABLE PROCEDURE

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Introduction

Pancreaticoduodenectomy (PD), a Whipple procedure, is rare and strictly reserved for destructive pancreaticoduodenal injuries in trauma. The objective of this study is to review our institutional experience with PD in trauma.

Methods

Retrospective review (2010 to 2021) at Grady Memorial Hospital. All patients identified with AAST-OIS Grades IV-V pancreatic & duodenal injuries were included. Demographics, injury characteristics, and outcome measures were studied.

Results

19 patients met criteria. Median age 31±12 years (range, 15 – 58 years), male (84%), & black (46%). Pancreas Injuries: Grade IV (4), Grade V (13). Duodenal Injuries: grade IV-V (2). Nine Staged PD reconstruction, mean of 44.8 hours. Sixteen Massive transfusion activation (84%) with a mean blood loss, 3734±1781 ml. Overall survival was 63%.

Variable	All patients (n=19)
GSW (%)	18 (95)
Mean Admission Systolic BP	94.1±43 mmHg
Mean Pulse Rate	97.6±42 bpm
Base deficit	-8.7±7.8.
Mean ISS	27±8.49
AIS-abdomen	5
Survival Rate	63%
Mean ICU LOS (days)	28±16.5
Mean Ventilator (days)	14.8±13.3
Total LOS	38.7±28.3
Resuscitative Thoracotomy	3
Damage Control	9

Concomitant Injuries	Patients (n=19)	% Patients
Major vascular injury	15	(79%)
High-grade liver injury	15	(79%)
Colon injury	14	(74%)

Fluid Resusc.	Mean Units
Packed RBC	24
FFP	17
Platelets	1
Cryoprecipitate	1



Figure 1: Intraop cholangiogram with ampulla disruption and contrast extravasation

Conclusion

Pancreaticoduodenectomy in trauma is rare. Hemorrhage was the leading cause of death in the first 24 hrs. The majority of survivors underwent damage control surgery and a staged PD.

References

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