

Timing of Thoracic Endovascular Aortic Repair in Traumatic Thoracic Aortic Injury: Immediate Versus Delayed Approach

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Background

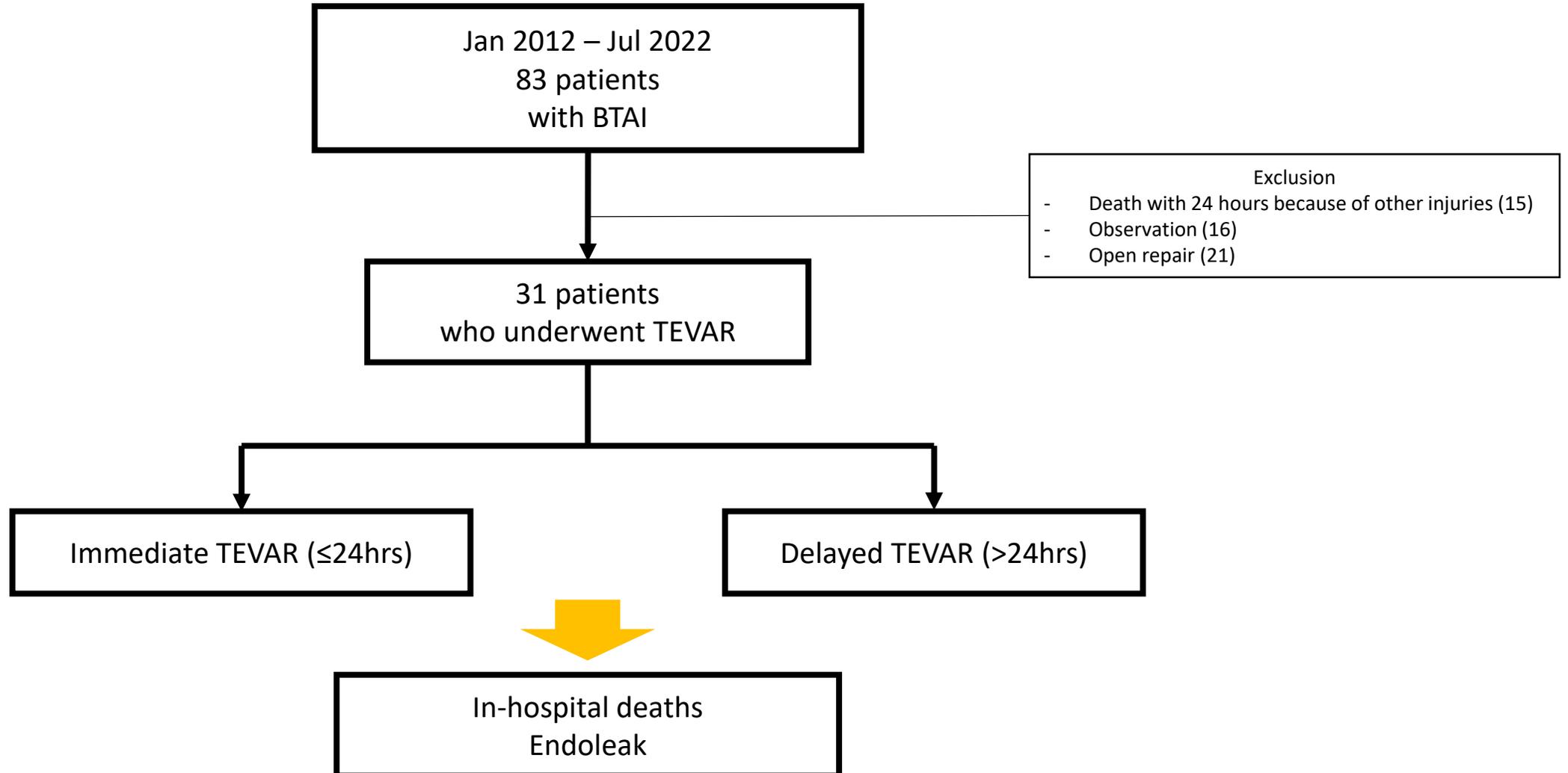
- **Blunt thoracic aortic injury (BTAI)**
 - The second leading cause of mortality among patients with multiple trauma
 - Thoracic endovascular aortic repair (TEVAR) → **Treatment Of Choice**
- In hemodynamically unstable patients,

When ?

Immediate

Delayed

Methods



Results

	Within 24 hours	After 24 hours	p-value
N	18	13	
Demographics			
Age (mean ± SD)	59.56 ± 11.94	55.77 ± 17.85	0.888
Male	13	12	
Injury severity (mean ± SD)			
Glasgow Coma Scale score	12.39 ± 3.81	9.54 ± 4.94	0.092
Systolic blood pressure	87.78 ± 37.50	75.38 ± 43.52	0.384
Injury severity score	39.12 ± 17.16	35.92 ± 8.47	1.000
Revised trauma score	6.46 ± 1.57	5.25 ± 2.92	0.263
Trauma injury severity score	59.25 ± 36.05	50.24 ± 40.65	0.401
Vasoactive inotropic score (VIS)	9.33 ± 24.70	26.02 ± 29.60	0.068
Aortic injury grades	3.17 ± 0.37	3 ± 0.39	0.433
Outcomes			
Endoleaks	3	0	0.245
Deaths	2	0	0.497
Hospital stay (mean ± SD)	40.56 ± 30.69	70.54 ± 48.78	<0.05
ICU stay (mean ± SD)	12.71 ± 12.75	34.31 ± 30.63	<0.05

Conclusions

- In the context of multiple trauma patients with elevated VIS, performing TEVAR after initial resuscitation does not appear to lead to an increased incidence of complications, including death or endoleaks.
- Delayed TEVAR might be a viable option in cases where immediate repair is not feasible due to hemodynamic instability.