

## Causes of Death in Surgically Treated Patients with Type A Aortic Dissection - A Ten Year Review

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# Causes of Death in Surgically Treated Patients with Type A Aortic Dissection - A Ten Year Review

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## Objective

The objective of this study was to review the manner of death in surgically treated patients with type A aortic dissection in a tertiary community hospital.

## Methods

All data was obtained via retrospective analysis for the 211 patients who were admitted with the diagnosis of an aortic dissection to a large community hospital over a ten year period. This cohort of patients was then broken down to type A and type B dissection. Patients with a diagnosis of type A dissection were further analyzed. This data was obtained by reviewing all postoperative information from the hospital admission until the time of death.

## Results

Out of the 211 patients, 92 (43.6%) had type A dissections. 68 patients (73.9%) went on to have surgery to repair the type A dissection. 35 patients (51.5%) have expired since the date of surgery. Average patient age was 63.07 years, and 17 patients (48.6%) expired during the same hospital stay (compared to 51.4% discharged patients). The top three causes of death for in hospital patients were malperfusion (13 patients), heart failure (2 patients), and aortic rupture (2 patients). For discharged patients the top three causes were other or unknown causes (12 patients), malperfusion (3 patients), and heart failure (3 patients). 50 patients were men and 18 were women.

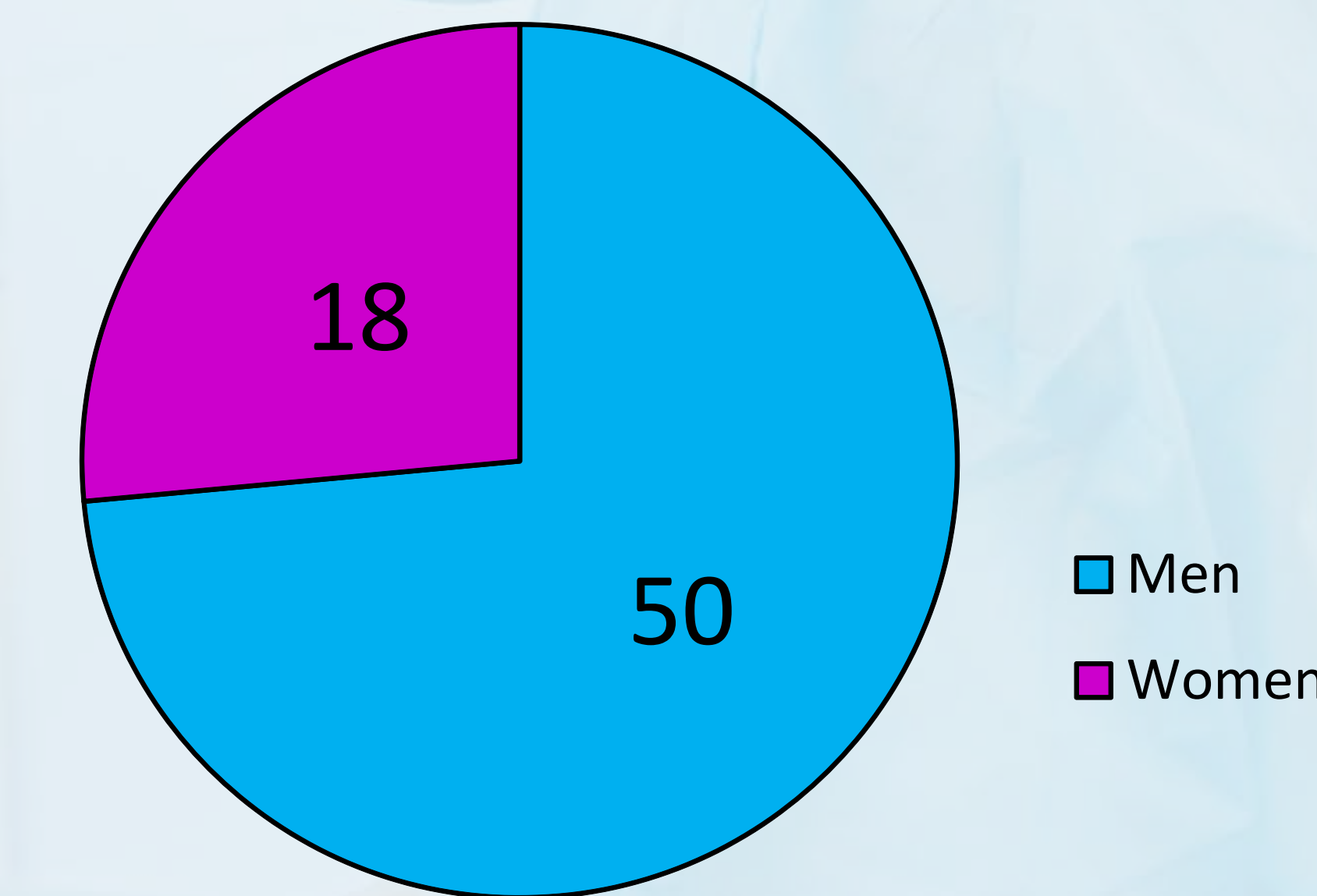
## Conclusion

Aortic Dissection is a life-threatening condition with a high surgical mortality rate. We found that the leading cause of death in surgically treated patients is malperfusion and the majority of patients died within the first week.

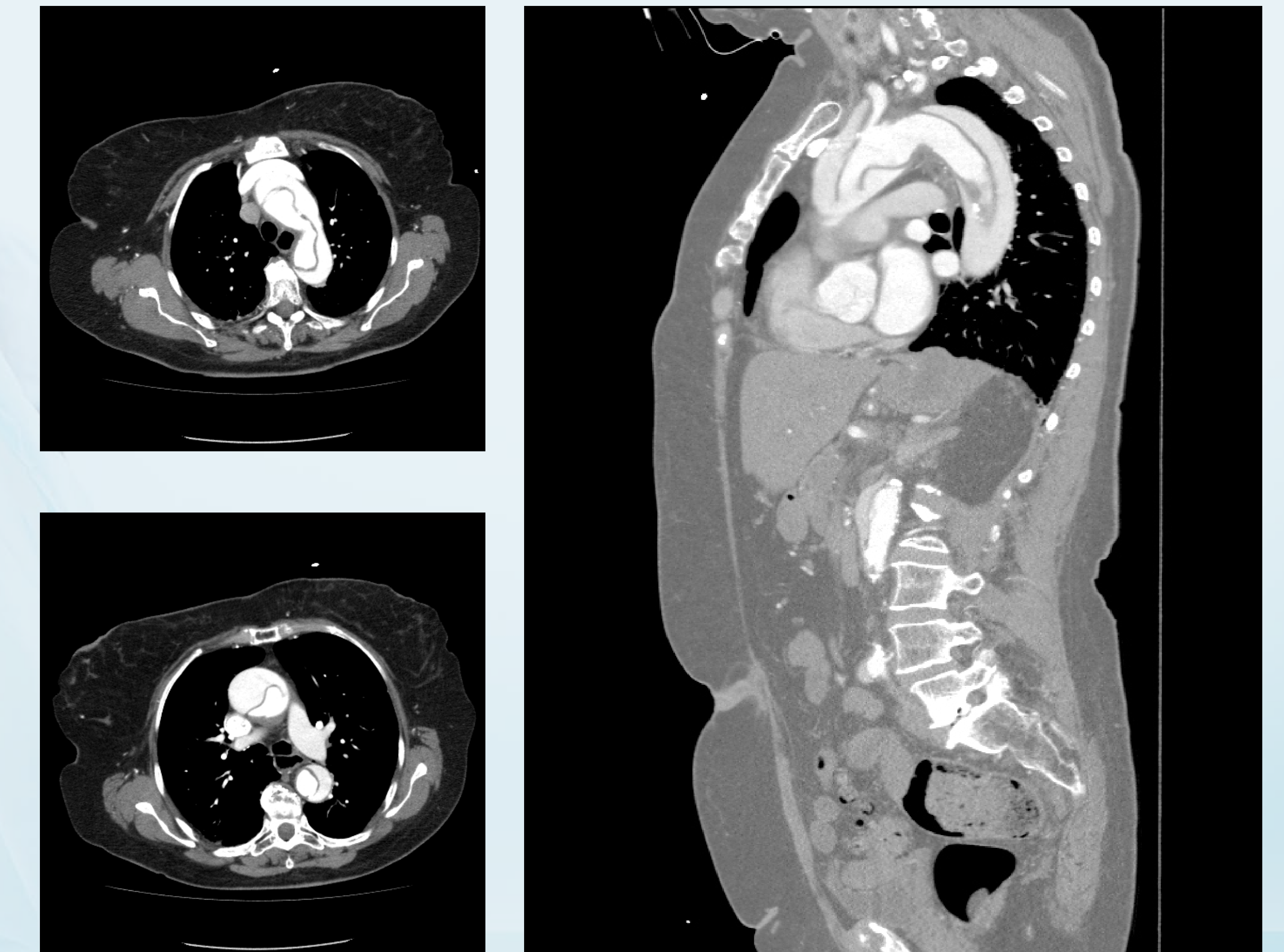
Table 1. Causes of Death in Type A Dissection Patients Treated Surgically		
Causes of Death	Inpatient	Outpatient
Malperfusion	13 (76.5%)	12 (16.7%)
Heart Failure	2 (11.8%)	3 (16.7%)
Aortic Rupture	2 (11.8%)	0
Unknown	0	3 (66.7%)

Table 2. Comorbid Conditions in Surgically Treated Patients with Type A Dissection		
Condition	Male	Female
Hypertension	94%	88.9%
Diabetes	20%	22.2%
Marfan Syndrome	20%	22.2%

Table 3. Demographics of Type A Dissection		
Total Average Age	Living Average Age	Expired Average Age
62.2	58.5	65.7



Figures 1: Demographics for patients with Type A Dissection.



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