


Aortic Dissections in D&G

WHAT ARE THEY?

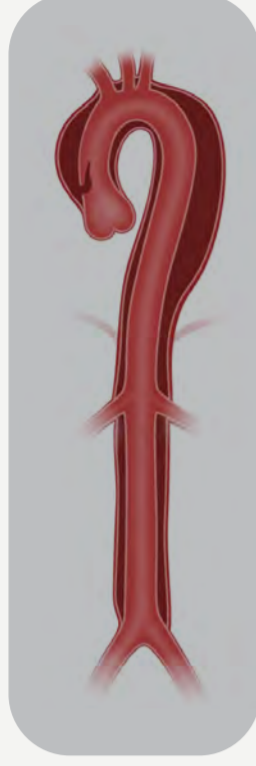
When a separation has occurred in the inner layer of the aorta, resulting in blood flow into a new false channel between the layers of the aorta

Classification




NORMAL

Type A




Type I



Type II

Type B



Type III

Risk Factors	<ul style="list-style-type: none"> HTN Cocaine Trauma Marfan's weight-lifting Ehler'sDanlos 				
Clinical Signs and Symptoms	<ul style="list-style-type: none"> Chest pain (sharp, sudden onset, may radiate to the back), syncope pulse deficits hypotension BP differentials 				
Investigations	<table border="0"> <tr> <td>Bloods:</td> <td>Imaging:</td> </tr> <tr> <td> <ul style="list-style-type: none"> D-dimer lactate </td> <td> <ul style="list-style-type: none"> CT aorta (and occasionally u/s) CXR may show a wide mediastinum </td> </tr> </table>	Bloods:	Imaging:	<ul style="list-style-type: none"> D-dimer lactate 	<ul style="list-style-type: none"> CT aorta (and occasionally u/s) CXR may show a wide mediastinum
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Treatment	<table border="0"> <tr> <td>Type A:</td> <td>Type B:</td> </tr> <tr> <td> <ul style="list-style-type: none"> BP control + surgery (normally Golden Jubilee) </td> <td> <ul style="list-style-type: none"> BP control </td> </tr> </table>	Type A:	Type B:	<ul style="list-style-type: none"> BP control + surgery (normally Golden Jubilee) 	<ul style="list-style-type: none"> BP control
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Prognosis	<ul style="list-style-type: none"> mortality of Type A is 1-2% every hour without treatment 				

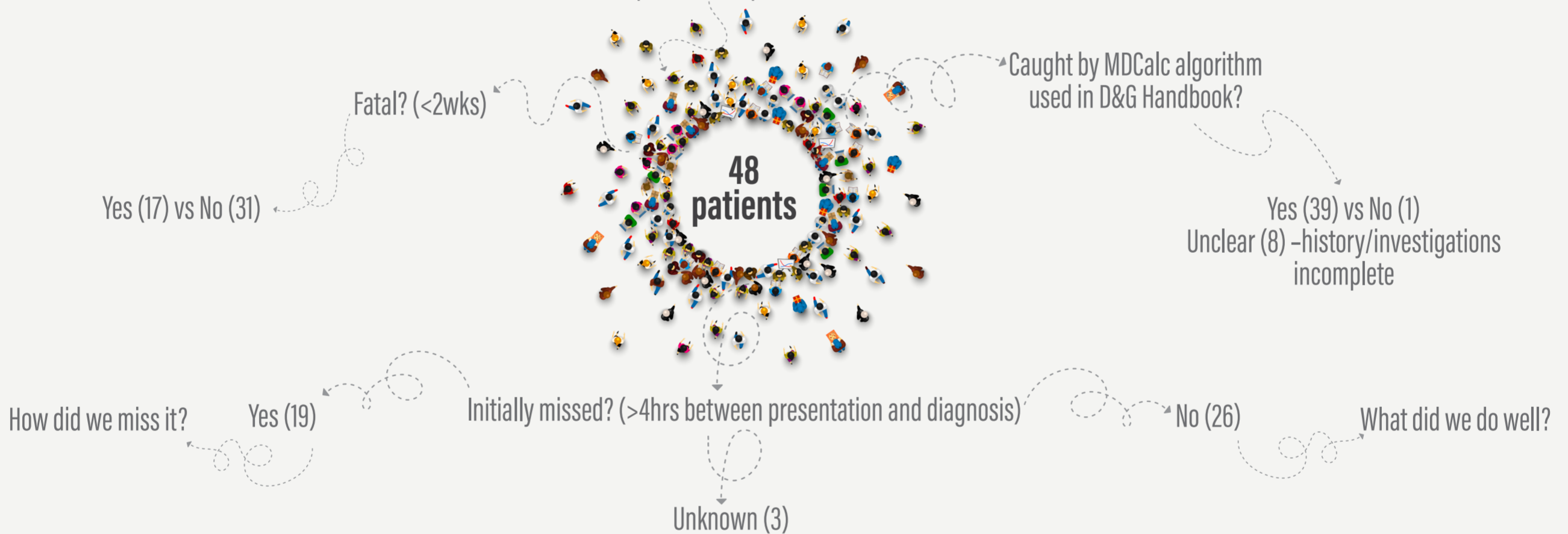
WHAT DID WE DO?

Data Collection: 2023-2013

1.Keyword search in ED attendances 2.ICD10 code of hospital stays 3.Keyword search of Death Certificates

Included patients with confirmed thoracic aortic dissections

Remove duplicates and patients with no notes



What did we learn?

1-The MDcals algorithm works.

Perhaps unsurprising, given that it was already well-validated, but we found it to have a sensitivity of 97.5%

2-We initially miss 42% of thoracic dissections.

Clinical History:

- Look out for chest pain that is sudden,sharp,severe, or associated with syncope
- Ask about Family History of aortic disease

Clinical Exam:

- Listen carefully for a diastolic murmur
- Examine for pulse deficits and take BP on both arms

Investigations:

- Chest pain + ^D-dimer ≠ P.E.

Fun Facts



Michael DeBakey, who pioneered surgical treatment of aortic dissection suffered a dissection himself at age 98, which was successfully repaired



King George II died of an aortic dissection while straining on the toilet

Fun Reference

Tsai TT et al. Acute aortic dissection: perspectives from the International Registry of Acute Aortic Dissection (IRAD) PMID: 19097813.