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AOD. Aortic Dissection

NIHR BioResource – Rare Diseases study project

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Summary

Aortic dissection is a potentially devastating condition that occurs suddenly and without warning. There is a strong genetic component to the disease with high blood pressure and cigarette smoking considered to be major clinical risk factors. The long-term outcomes vary greatly between individuals that survive the initial event. In some patients, the aorta remodels and a quiescent course ensues. In other patients, the aorta enlarges over time and can rupture.
We believe that this BioResource will provide an opportunity the study aortic dissections and make important discoveries. These include:

- Understanding the genetic, imaging and clinical risk factors that predict outcomes in the longer term
- Understanding the proportion of patients with and aortic dissection that carry rare, damaging genetic mutations in genes known to cause aortic problems. This could inform cascade screening of relatives
- Understanding the vascular and non-vascular features of carrying a rare genetic mutation in known aneurysm genes in both healthy individuals and patients with a dissection. Both patients and healthy individuals will be recalled for detailed imaging studies

Recruitment Criteria

Inclusion

Patients, aged less than 70 years old, that have an aortic dissection (Stanford Type A and Type B). This includes patients that have undergone intervention (open or

endovascular treatments) and includes patients with acute aortic syndrome, intramural haematoma or acute penetrating ulcers.

First degree relative of the patient can be recruited. The first degree relative may be either affected, in line with the above criterion, or unaffected.

Exclusion

Iatrogenic or traumatic aortic dissection.
Patients deemed unable / too ill to give consent.