



GEN87 – Evaluation of Adverse Events of Angiotensin Conversion Enzyme Inhibitors in Individuals with Thoracic Aortic Disease

OBJECTIVE: Analyze GenTAC data for the outcomes of patients with Marfan syndrome, other inherited forms of thoracic aortic disease, and BAV-associated aneurysms treated with ACE inhibitors and compare them with patients treated with β -blockers or ARBs.

ORGANIZATION

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prior to enrollment, and the risk of aortic surgery or aortic dissection in these two groups.

Inclusion criteria:

- Subjects with confirmed MFS, LDS, FBN1, BAV, FTAAD diagnosis; subjects <50 years of age with confirmed diagnosis of other aneurysms/dissections of the thoracic aorta
- Age 5 years or older

Samples:

- None

BACKGROUND AND RATIONALE

Angiotensin converting enzyme (ACE) inhibitors are used extensively to treat hypertension, a major contributor to ascending aortic aneurysm. Hypertension is hypothesized to increase the biomechanical stress on the wall of the aorta, and clinically multiple classes of antihypertensive agents are being utilized to treat patients with thoracic aortic disease.

We propose to investigate the clinical use of ACE inhibitors to determine their effects on the development and progression of aortic aneurysms and dissections. We plan to perform a retrospective case-control study to assess ACE inhibitors' effects on aortic dissection, aortic surgery, or aneurysm growth on patients with Marfan syndrome, other forms of inherited aortic disease, and BAV-associated aneurysms.

Data:

- Surgical
- Genetic
- Image
- Medication Use
- Demographics

CONCLUSIONS

Results:

- Pending

DESIGN

Method:

- Using the data currently available in the GenTAC consortium, we will compare the risk of aortic dissection between patients on ACE inhibitors versus other antihypertension medications at the time of enrollment.
- Patients would be considered positive if they were on an ACE inhibitor at the time of or prior to enrollment.
- We would also like to compare between pati inhibitors versus beta blockers or ARB's at tir