



GEN24 - The effect of calcium channel blocker therapy on patients with Marfan syndrome

OBJECTIVE: To assess whether the rate of aortic dissection is greater in patients who had taken or were taking any CCB and whether the time to surgical intervention is shorter in patients who had taken or were taking any CCB

ORGANIZATION

Lead Investigator: Hal Dietz, MD

Co-Investigators: Jefferson Doyle, MD

Funding Source: GenTAC

CONCLUSIONS

Results: This study is currently pending prospective imaging data.

BACKGROUND AND RATIONALE

Recent evidence indicates that treatment with both main classes of calcium channel blocker (CCB), namely the dihydropyridines (i.e. amlodipine) or non-dihydropyridines (i.e. verapamil), exacerbates aortic aneurysm progression in Marfan mice. Furthermore, amlodipine causes premature death in these animals, with 50% dead after only 3 months of treatment, secondary to aortic dissection. In preliminary GenTAC analysis, Marfan patients who had taken or were taking any CCB at the time of enrolment in the GenTAC registry had an increased risk for aortic dissection.

DESIGN

- Hypothesis:*
- The rate of dissection will be greater and/or time to surgical intervention will be shorter in Marfan patients who had taken CCB therapy, compared to patients who had taken other therapies.
- Inclusion criteria:*
- Marfan subjects with CCB use and/or a dissection were selected from the GenTAC cohort for additional data collection.
- Samples*
- None
- Data*
- Surgical and imaging data. Demographics and family history. Number and types of dissections with dates. Date of aortic replacement and medications taken prior to and during dissection.

