

ADULT CHIARI MALFORMATION PATIENTS NEEDED FOR TREADMILL STUDY AT CLEVELAND STATE UNIVERSITY

Are you eligible?

Eligibility requirements:

- Must be diagnosed with Chiari Malformation
- Must be at least 21 years of age
- Must be able to walk and stand without assistive devices
- Open to males and females
- Non-diabetic
- No orthopedic surgeries to the leg or foot

Interested in volunteering?

Participants will be asked to complete:

- One (1) laboratory visit that involves walking on a treadmill and standing on a balance platform
- The session will last approximately two (2) hours

Benefits?

Benefits for participants include:

- Parking costs will be covered for each laboratory visit
- A small monetary compensation will be given for each laboratory visit

Location?

Cleveland State University – Center for Human Machine Systems

Why should you participate?

We know that life with Chiari Malformation is difficult. Our mission with this study is to learn how reactions and predictions to movement are impaired in adults with Chiari compared to adults without. The results from this study will allow us to work with clinicians to better understand Chiari and discover ways to help.

Who is performing the study?

The research team at Cleveland State contains a graduate student researcher and principle investigators (PI). Brittany Sommers (graduate student) and Dr. Brian Davis (PI) have been researching how Chiari Malformation impairs gait and balance for three years.

For more information or to volunteer email:

B.L.Davis@csuohio.edu

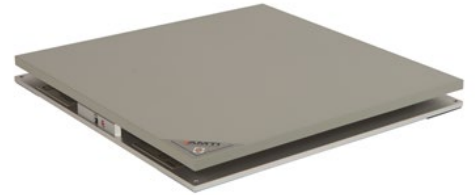


What exactly will you be doing?

By participating in the study, you will be asked to do the following balance and walking tests

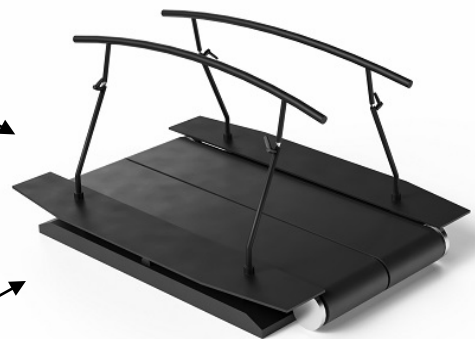
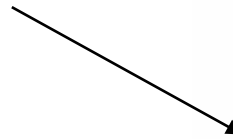
Balance tests (Completed 3x total):

- Stand on a force platform 5 times for 30 seconds each. You will do this with your eyes open, and again with your eyes closed. This allows us to test your balance.



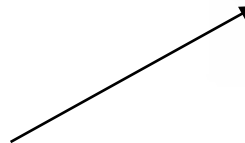
Normal walking tests (Completed 2x total):

- Walk on a treadmill for 5 minutes at a comfortable walking speed. You will be in a safety harness during this task. You will also wear small markers that will be recorded by motion capture cameras. This will allow us to track the position of your joints as you walk.



Perturbed walking tests (Completed 3x total):

- You will walk on the same treadmill at a comfortable walking speed for 7 minutes. Small, brief accelerations will be applied randomly to the belt. The belt will return to its normal speed immediately after. This is to simulate a trip-like motion. You will be in a safety harness during this entire task.



Is this safe?

The risks in this study are the same risks you take with normal walking and standing. The treadmill perturbations are not designed to make you fall. You will always be in a safety harness, and our research team will be beside you in case you trip or fall. You will be asked to rest in between every task. We will not move forward until you feel comfortable and ready to do so. You can stop testing at any time if you do not want to continue.