

Research trial for speech perception in Friedreich's ataxia – recruiting now

Volunteers are being recruited for a new research trial looking at hearing and speech perception in people with Friedreich's ataxia. The trial is being run by Dr. Kai Uus from the Audiology and Deafness Group at the University of Manchester and is a follow-up study based on promising results from an earlier pilot trial.

Background

Although hearing loss can occur in individuals with FA, it is only marginally more prevalent than in the general population. A more subtle hearing problem known as Auditory Neuropathy Spectrum Disorder is seen more frequently. People with Auditory Neuropathy Spectrum Disorder have difficulty in listening to complex sounds, particularly in noisy backgrounds. It is particularly difficult for them to understand speech clearly and this is described as having poor speech perception.

In order for sounds to be heard, acoustic information from the environment is transmitted from the inner ear to the brain via the auditory nerve. This is done by electrical impulses being sent along the nerve. In Auditory Neuropathy Spectrum Disorder, the messages from the inner ear to the brain are disrupted. This study will investigate the perception of speech in people with Friedreich's ataxia by taking electrophysiological measurements of the auditory pathway (that is monitoring the electrical impulses sent along the auditory nerve in response to certain sounds) and by measuring behavioural responses to sounds. It is hoped that the findings of the study may aid understanding of the mechanism of hearing loss in Friedreich's ataxia.

The results should also allow Dr. Uus to investigate how the electrophysiological measurements relate to behaviour and to use this information to develop electrophysiological techniques for investigating speech perception in individuals with Auditory Neuropathy Spectrum Disorder. This will be particularly useful for the diagnosis and study of babies with the disorder, as it is not possible to use behavioural techniques to measure hearing in infants under the age of 6 months.

What will be required?

The study will take place over two sessions, each lasting up to 2 hours. In these sessions, the participant will be asked to listen to some sounds whilst the electrical impulses in the auditory nerve are recorded. The recording is done by a non-invasive method - via disposable electrodes that are placed on

the scalp of the participant whilst they sit comfortably. The study will be carried out at the University of Manchester and travel expenses will be reimbursed.

Are you interested in taking part?

In order to take part in this study you will need to have a confirmed diagnosis of Friedreich's ataxia. If you would like to participate, please E-mail Dr. Uus (contact details below), with your contact details and preferred method of contact. Dr. Uus is also happy to address any concerns or discuss the study in more detail.

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