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Study of the effectiveness of Auditory integration therapy in the treatment of auditory hypersensitivity in autism spectrum disorders

Submission date	Recruitment status	[ ] Prospectively registered
24/12/2009	No longer recruiting	[ ] Protocol
Registration date	**Overall study status**	[ ] Statistical analysis plan
31/08/2010	Completed	[ ] Results
Last Edited	**Condition category**	[ ] Individual participant data
31/08/2010	Mental and Behavioural Disorders	[ ] Record updated in last year

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
N/A

Study information

Scientific Title
The effectiveness of Auditory integration therapy in the treatment of auditory hypersensitivity in autism spectrum disorders: A single blind randomised controlled trial study

Acronym
AIT Autism

Study objectives
Auditory integration therapy is effective in reducing the auditory hypersensitivity in autistic children

Ethics approval required
Old ethics approval format

Ethics approval(s)
The College of Medicine and King Khalid University Ethics Committee approved on the 27th of December 2009. (ref: E-09-065)

Study design
Single centre randomised controlled interventional study

Primary study design
Interventional

Study type(s)
Treatment

Health condition(s) or problem(s) studied
Autism spectrum disorders

Interventions
The children will be assessed as follows:
1. Physician (to confirm the diagnosis) using
1.1. The Developmental, Dimensional and Diagnostic interview (3DI)
1.2. Childhood Autism Rating Scale (CARS)
2. Parents and Psychologist will fill the following
2.1. Health questionnaire
2.2. ORCA Diagnostic check list
2.3. Autism Treatment Evaluation Checklist (ATEC)
3. ENT specialist
Children with a history of seizure disorder will be excluded.
Written informed consent will be obtained from the parents/guardian.
During the study period, children were not allowed to begin any new therapies or stop any current therapies, including medications and supplements.

Auditory integration training will be conducted according to the following protocol:
The listener receives 18 to 20 listening sessions lasting for 30 minutes, over a 10- to 20-day period. In most cases, with a 1- or 2-day break after 5 days of listening. During the listening

sessions, the child listens to processed music. That is, the AIT sound amplifier attenuates low and high frequencies at random from the compact discs, and then sends this modified music through headphones to the listener. This random selection of frequencies is termed 'modulation.' The intensity level (volume) during the AIT listening sessions should not exceed 85 decibels (dBA).

Intervention Type
Other

Phase
Not Applicable

Primary outcome(s)
Reflection in sensory hypersensitivity, assessed at baseline. 3, 6 and 9 months.

Key secondary outcome(s))
1. Increased attention
2. Better hearing
3. Increased concentration
Outcomes assessed at baseline, 3, 6 and 9 months, using the following tools:
1. Parent Questionnaire
2. Health Q!uestionnaire
3. ORCA diagnositic checklist
4. CARS
5. ATEC

Completion date
01/01/2012

Eligibility

Key inclusion criteria
Autism spectrum disorders with auditory sensory hypersensitivity

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Child

Sex
All

Key exclusion criteria
1. Epilepsy
2. Cerebral palsy
3. Tuberous sclerosis

Date of first enrolment
01/01/2010

Date of final enrolment
01/01/2012

Locations

Countries of recruitment
Saudi Arabia

Study participating centre
Auditory Integration Therapy Project (AIT)
Riyadh
Saudi Arabia
11461

Sponsor information

Organisation
King Abdul Aziz City for Science and Technology (KACST) (Saudi Arabia)

ROR
https://ror.org/05tdz6m39

Funder(s)

Funder type
Research organisation

Funder Name
King Abdul Aziz City for Science and Technology (KACST) (Saudi Arabia)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes