

Repetitive Transcranial Magnetic Stimulation Combined With Language Training for Language Disorders in Children With Global Developmental Delay

NCT07369960

Status	RECRUITING
Phase	Not Applicable
Sponsor	Xiangya Hospital of Central South University
Enrollment	50 participants

Key Eligibility Criteria

Inclusion (4)

- Children aged 2-5 years old, regardless of gender.
- Meet the diagnostic definition of GDD in China's Diagnostic Guidelines for Global Developmental Delay (2024), confirmed by Gesell Developmental Schedules (GDS). Language domain Developmental Quotient (DQ) ≤ 75 . A DQ ≤ 75 is found in at least one of the four developmental domains: gross motor, fine motor, adaptive behavior, and personal-social conduct. Mild-moderate GDD is selected for the study.
- The presence of significant language developmental delay, the language ability is significantly lower than children of the same age and the same intellectual level, confirmed by the standardized scale of Sign-Significate Relations (S-S) assessment.
- The child is able to cooperate with the completion of rTMS treatment and language assessment and has no serious behavioral problems.

Exclusion (3)

- 1. History of epilepsy or convulsive seizures. 2. Having metal implants in the skull (e.g. aneurysm clips, metal stents, etc.) and electronic devices such as pacemakers and cochlear implants in the body.
- 3. Other serious neurological conditions that may affect language function (e.g., cerebral palsy, progressive neurological disorders, etc.).
- 4. Have a diagnosis of ASD. 5. Have a severe hearing or visual impairment. 6. Participation in other clinical trials that may affect speech function. 7. Skin lesions or infection at the scalp treatment site. 8. The fontanelle has not yet closed. 9. Previous rTMS treatment in the last 3 months. 10. Developmental quotient < 40 in any developmental domains; other circumstances that prevented cooperation with the study.

Locations (1 total)

Xiangxi Autonomous Prefecture People's Hospital, The intersection of Century Avenue and Jianxin Road in Qianzhou Sub-district, Jishou (416000), Hunan, China., Jishou, Hunan, China