What is dysarthria?

Dysarthria is a condition affecting speech production. It results in slurred speech due to weak or imprecise movements of the speech organs. These can include the articulatory organs of the lips, tongue and jaw, the larynx, the control of the airstream on which speech is produced through the respiratory tract and the movement of the soft palate and pharynx.

The involvement of these different parts of the speech production and mechanism may vary. Dysarthria occurs in a number of neurological conditions and can be the result of brain dysfunction or injury. This means that it may be part of a developmental speech condition (present from birth) or an acquired condition (as a result of the onset of a particular neurological condition or after brain injury).

Dysarthria can range in severity from mild, through moderate to severe. Speech patterns may have a number of different characteristics depending on the nature of the damage to the brain. The speed of speech production may be affected. Most commonly speech is slow, but sometimes quick involuntary movements affect speech production. All movements may be slow and limited in range. Those with very severe dysarthria may have no movement at all in some organs which are required to move in a controlled way for clear speech production.

Where dysarthria is associated with cerebral palsy, or head injury, there may also be difficulties in language understanding or general learning. It is important to understand these as they may influence the approach taken for education or speech and language therapy.

Sometimes dysarthria is called Worster-Drought syndrome (www wdssg org uk). This is more appropriate where it is congenital and non-progressive and is associated with mild general motor problems and some general learning problems. The condition may run in families and an early history of poor sucking and swallowing is usual. There may be difficulties in introducing solid food. The usual pattern is of weakness and problems controlling the voluntary movement of the lip muscles, tongue, soft palate and, when more severe, the pharyngeal and laryngeal muscles. Speech usually sounds very “nasal”, slurred and indistinct, but children can be anarthric (i.e. unable to develop useful movement for speech).

What to do about dysarthria

Assessment by a speech and language therapist is helpful for a child with dysarthria. Different treatment options may be explored according to the type and severity of the dysarthria. Where dysarthria is accompanied by severe drooling (as in some types of cerebral palsy), drug or surgical management may be recommended, and the therapist may have a role in monitoring these effects. Where speech is unintelligible and likely to remain so for some time, a Communication Aids Centre might be consulted for advice about alternative and augmentative communication. Such centres can also advise less severely dysarthric speakers who want to opt for a communication aid (see Glossary Sheet 9).

Early treatment for developmental dysarthria emphasises the building up of developmental motor patterns, increasing range and precision of movement through exercise. These build on the child’s general developmental and motor progress. Specific treatments in older children with residual dysarthrias may include electropalatography, a computerised visual display system which gives a child feedback about the accuracy of their speech production.

References


Please note: Afasic does not hold copies of any referenced material. However, it may be obtained via academic libraries.
Other relevant Glossary Sheets

- Alternative/augmentative communication (9)
- Dyspraxia (18)

Other organisations which can help

SCOPE
6 Market Road
London
N7 9PW
Tel: 020 7619 7100
Where dysarthria is part of a general motor problem

CHIT (Children’s Head Injury Trust)
c/o Neurosurgery Department
Radcliffe Infirmary
Woodstock Road
Oxford
OX2 6HE
Tel: 01865 552467
Where dysarthria is part of a post traumatic condition

The ACE Centre Advisory Trust
92 Windmill Road
Headington
Oxford
OX3 7DR
Tel: 01865 763508/759800
For communication aids

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