



**Abduct.** Pull apart, open, as in *abducted* vocal folds.

**Abductor Spasmodic Dysphonia (ABSD).** A less common subtype of spasmodic dysphonia, a relatively rare voice disorder, characterized by sudden abduction of vocal folds during speech and the consequent cessation of phonation, bursts of breathiness, increased frequency of vocal spasms, and normal or near-normal voice except for such phonation breaks; see Spasmodic Dysphonia (SD).

**Abulia.** Extreme lack of motivation, found in some psychiatric and neurological disorders; not an independent disease entity, but a symptom of specific clinical conditions; the person with abulia is uninterested in any kind of activity, including speaking; an extreme form of abulia is called akinetic <u>Mutism</u>, in which the client is alert, does not have neuromotor disorders related to speech, but still lacks motivation to speak; any speech that gets produced is initiated slowly; utterances tend to be brief and prosodically flat; abulia may be associated with severe anterior or mesial frontal lobe damage; see also <u>Psychiatric Problems</u> Associated With Communication Disorders.

**Acoustic Nerve.** The cranial nerve VIII that conducts sound impulses from the cochlea to the brain's auditory center.

**Acquired Communication Disorders.** Not due to genetic or neurophysiological conditions; may be learned, may be idiopathic; may be due to neurological events (e.g., strokes and traumatic brain injury).

## **Acquired Immunodeficiency Syndrome (AIDS).**

A syndrome caused by human immunodeficiency virus, which causes the destruction of white blood cells and reduces cell-mediated immunity to diseases; drug treatment has made significant progress in controlling the disease and reducing opportunistic infections; patients' survival rate and duration have improved; untreated or

ineffectively treated AIDS may cause a type of dementia known as the AIDS Dementia Complex.

**Acrocephaly.** A cranial abnormality found in certain genetic syndromes, resulting in high-domed skull (see <u>Syndromes</u> Associated With Communication Disorders).

Acute. A short, suddenly emerged, severe clinical condition.

**Adaptation Effect.** Progressive decrease in the frequency of stuttering when a printed passage is orally read repeatedly; maximum decrease observed on the second reading; decrease is progressively less on subsequent readings, with little or no decrease after the fifth reading; the effect is reduced or eliminated by rest pause between readings; there is no transfer of the effect across passages; contrasted with Consistency Effect.

Adductor Spasmodic Dysphonia. A more common variety of spasmodic dysphonia; a voice disorder of presumed neurological origin; characterized by vocal fold adduction with excessive force and effort; the resulting voice sounds strained and strangled; associated features may include head jerks, eye blinks, and repetition of speech sounds; see Spasmodic Dysphonia (SD) and Voice Disorders.

Adjacency Effect. Occurrence of new stuttering on previously fluently read words because they are adjacent to words that were stuttered in prior oral readings of the same passage; the effect may be recorded by blotting out the previously stuttered words and asking the client to read the passage aloud; some of the words printed before, after, above, and below the blotted words may be stuttered on repeated readings even though they were initially read fluently; shows that stuttering is under stimulus control.

**Afferent.** Flow of information toward cell body.



**Affricates.** Speech sounds that include stops and fricatives.

**African American English (AAE).** A dialect of American English shaped by the cultural and historical forces of African American people.

**Agenesis.** Absence of an organ due to a genetic defect.

Agnosia. A group of disorders in which recognition of sensory stimuli is impaired to varying extents due to central nervous system dysfunction in the absence of impaired sense organs; the individuals can see, hear, or feel stimuli or objects but are unable to grasp their meaning; rare in its pure form; to diagnose agnosia, it should not be a function of intellectual deterioration or dementia that also may give the impression of agnosia; once they recognize the stimulus, they can name it; a person who cannot recognize an object presented visually may recognize it in some other modality (e.g., tactile or auditory); the major types of agnosia include the following:

- Auditory agnosia: Difficulty recognizing the meaning of auditory stimuli including language, in the absence of peripheral hearing loss as assessed by pure tone audiometry; bilateral damage to the auditory association areas is the typical cerebral pathology; the individuals
  - Can hear a sound but cannot understand its meaning
  - May visually recognize an object but cannot match the object with its sound
- Auditory verbal agnosia: Difficulty understanding the meaning of spoken words the person hears well; also known as *pure word deafness*, a rare form of agnosia; bilateral temporal lobe lesions that isolate Wernicke's area from the other parts of the brain are thought to cause it; the individuals
  - May have significant problems understanding the meaning of what others say
  - May recognize nonverbal sounds
  - May recognize printed or written words
  - May have intact spontaneous speech, reading, and writing

- Prosopagnosia: Difficulty recognizing familiar faces due to right hemisphere damage. The persons
  - May fail to recognize the faces of family members, friends, and other familiar persons
  - May recognize the face when the person begins to speak
- Tactile agnosia: Difficulty recognizing or discriminating objects through touch when blindfolded and does not hear the sounds that are associated with them (if any); lesion in the parietal lobe that isolates the somatosensory cortex from other parts of the brain is the most common cause; the individuals
  - Report normal sensation through touch, but cannot name the objects they touch or hold in their hands while they cannot see them
  - May correctly name the objects when they see them or hear the characteristic sounds
- Visual agnosia: This is difficulty recognizing or discriminating visual stimuli, a rare form of agnosia; causes include bilateral occipital lobe lesions, posterior parietal lobe lesions, or damaged fibers that connect the visual cortex to other brain regions; the individuals
  - Cannot name what they see
  - May have no difficulty naming the objects when they hear their characteristic sounds
  - May name the objects when they touch them

**Agrammatism.** Deficient grammar (missing grammatic features) in spoken or written language, also known as Telegraphic Speech. Sentence length and variety are limited; a characteristic of nonfluent forms of Aphasia, especially Broca's Aphasia (see Aphasia: Specific Types).

**Agraphia.** Loss or impairment of previously acquired writing skills due to recent brain pathology; writing problems in children are typically associated with learning disorders and are not classified as agraphia; in adults, agraphia is associated with aphasia, dementia, and other neurological disorders; controversially, the foot of the second frontal gyrus has been suggested as the area that controls writing

(Exner's area); several areas in the left hemisphere may be involved in writing; speech-language pathologists assess and treat writing problems in the context of <u>Aphasia</u> and other language disorders; the loci of brain lesions and their consequences include the following:

- Left hemisphere lesions: They lead to structural and syntactic writing problems; the writing
  - Tends to contain morphologic and syntactic errors
  - May include neologistic constructions found in individuals with aphasia
- Right hemisphere lesions: They may affect the spatial aspects of writing, especially in individuals with right hemisphere damage; the individual
  - May fail to give margins and adequate spaces in between words and sentences
  - May neglect the left side of the page in writing
- Apraxic agraphia: Writing problems associated with Apraxia, possibly due to focal brain lesions in the parietal lobe; problems include
  - Disorders of letter formation, numerous spelling errors, and repeated words
  - Each letter of the alphabet may be only a scribble in severe cases
  - Writing only in capital letters—spontaneous writing, copying, and writing to dictation may all be equally affected
- Motor agraphia: Writing problems due to impaired neuromotor control. Upper and lower motor neuron pathology may affect the muscles of the hand and thus lead to motor agraphia. Individuals may
  - Write with very small letters or the size of the letters may progressively decrease (hypokinetic agraphia or micrographia)
  - Write in a highly disorganized manner or may find it impossible to write because of tremors, tics, chorea, and dystonia (hyperkinetic agraphia)
- Pure agraphia: An isolated writing disorder in the context of normal language functions, including normal auditory comprehension; not a part of aphasia, and its existence is in doubt; suggested neuroanatomic sites of