Conduction aphasia, also called associative aphasia, is a relatively rare form of aphasia. An acquired language disorder, it is characterized by intact auditory comprehension, fluent (yet paraphasic) speech production, but poor speech repetition. They are fully capable of understanding what they are hearing, but show significant difficulty repeating phrases, particularly as the phrases increase in length and complexity and as they stumble over words they are attempting to pronounce.

Patients will display frequent errors during spontaneous speech, such as substituting or transposing sounds. They will also be aware of their errors, and will show significant difficulty correcting them.

Shallice and Warrington (1970) were able to differentiate two variants of this constellation: the reproduction and the repetition type. These authors suggested an exclusive deficit of auditory-verbal short-term memory in repetition conduction aphasia whereas the other variant was assumed to reflect disrupted phonological encoding mechanism, afflicting confrontation tasks such as repetition, reading and naming in a similar manner.

Typical lesion location for conduction aphasia is on the supramarginal gyrus of the parietal lobe, posterior to the primary sensory cortex and just above Wernicke's area.

The classical explanation for conduction aphasia is that of a disconnection between the brain areas responsible for speech comprehension (Wernicke's area) and speech production (Broca's area), due specifically to damage to the arcuate fasciculus, a deep white matter tract. Recent research has challenged this notion on the basis that patients with conduction aphasia more often have lesions in the supramarginal gyrus or deep parietal matter.

However, conduction aphasia remains a controversial topic from the understanding of its neurologic foundations.