

Phonological Deficits. There is wide consensus that dyslexia is caused by a phonological deficit; that is, a difficulty in the representation of speech sounds.

Unlike [stroke](#), [left hemisphere glioma surgery](#) acts upon a [reorganized language network](#) and involves brain areas rarely damaged by stroke. Zyryanov et al. addressed whether this causes the profiles of neurosurgery- and stroke-induced language disorders to be distinct. K-means clustering of language assessment data (neurosurgery [cohort](#): N = 88, stroke cohort: N = 95) identified similar profiles in both cohorts. But critically, a cluster of individuals with specific phonological deficits was only evident in the stroke but not in the neurosurgery cohort. Thus, [phonological deficits](#) are less clearly distinguished from other language deficits after [glioma surgery](#) compared to stroke. Furthermore, the correlations between [language production](#) and comprehension scores at different linguistic levels were more extensive in the neurosurgery than in the stroke cohort. The findings suggest that neurosurgery-induced language disorders do not correspond to those caused by stroke, but rather manifest as a 'moderate [global aphasia](#)' - a generalized decline of [language processing](#) abilities ¹⁾.

¹⁾

Zyryanov A, Stupina E, Gordeyeva E, Buivolova O, Novozhilova E, Akinina Y, Bronov O, Gronskeya N, Gunenko G, Iskra E, Ivanova E, Kalinovskiy A, Kliuev E, Kopachev D, Kremneva E, Kryuchkova O, Medyanik I, Pedyash N, Pozdniakova V, Pronin I, Rainich K, Reutov A, Samoukina A, Shlyakhova A, Sitnikov A, Soloukhina O, Yashin K, Zelenkova V, Zuev A, Ivanova MV, Dragoy O. 'Moderate global aphasia': A generalized decline of language processing caused by glioma surgery but not stroke. *Brain Lang.* 2021 Dec 6;224:105057. doi: 10.1016/j.bandl.2021.105057. Epub ahead of print. PMID: 34883333.

From:

<https://neurosurgerywiki.com/wiki/> - **Neurosurgery Wiki**

Permanent link:

https://neurosurgerywiki.com/wiki/doku.php?id=phonological_deficit

Last update: **2024/06/07 02:52**

