AUCTORES
Globalize your Research

Journal of Surgical Case Reports and Images

Abhishek Budiguppe Panchakshari *

Open Access

Opinion

Is there an upward shift in the age of onset of aphasia?

Abhishek Budiguppe Panchakshari

Assistant Professor in Language Pathology Department of Speech-Language pathology, AIISH Mysore.

***Corresponding Author:** Abhishek Budiguppe Panchakshari, Assistant Professor in Language Pathology Department of Speech-Language pathology, AIISH Mysore.

Received Date: June 21, 2024; **Accepted Date:** July 01, 2024; **Published Date:** July 08, 2024

Citation: Abhishek B. Panchakshari, (2024), Solid Lipid Nanoparticles -A Novel Carrier, *J, Surgical Case Reports and Images*, 7(6); **DOI:10.31579/2690-1897/201**

Aphasia is an acquired language disorder of neurological origin. In other words, the language areas in the brain is affected due to an insult [1]. Two major areas Broca's Area and Wernicke's Area are assumed to contribute to language processing. In addition to these areas, areas like angular gyrus and supra-marginal gyrus also are assumed to have a role in language processing.

Conditions such as stroke, traumatic brain injury and tumors are known to cause an insult to the brain. Stroke being the predominant cause of aphasia. Stroke is also called as cerbero-vascular accident. Stroke further can be classified into ischemia and hemorrhage. Ischemia is caused when there is a blood clot (a stationary clot or a dynamic clot) while hemorrhage is associated with the rupture of blood vessels. Regardless of whether aphasia is caused due to ischemia or hemorrhage, the dynamics of blood flow is assumed to get affected. Further when the blood flow gets interrupted, the oxygen supply to the brain cells gets altered., owing to the oxygen interruption, the brain cells would lie. If the loci of the infract is in and around the brain areas, it is known to cause aphasia. Traumatic brain injury (TBI) is the next leading cause of aphasia. Traumatic brain injury can be caused due to road traffic accidents, bullet injury or a blunt hit to the brain. Some of these brain injuries are external in nature while some of the brain injuries are internal causing hematoma or hemorrhage. Traumatic brain injury can have immediate effects ranging from nausea to loss of consciousness and long lasting effects like cognitive and language deficits. The same principle which applies to stroke applies to TBI also pertaining to aphasia. In other words if the language areas in the brain gets invaded or affected it can cause aphasia. In addition to the stroke and TBI, aphasia can also be caused due to tumors, which may either originate in the brain or spread from other parts of the body through a process called metastasis. Metabolic conditions and alcoholism also can cause aphasia, however the prevalence rate of these conditions are relatively less compared to stroke [2]. Several demographical factors such as age, gender, ethnicity, race can influence the prognosis of aphasia. Age is considered as an important factors. Though some studies in this direction have shown that younger the age, better is the prognosis, there is mixed findings regarding the same [3]. However the role of age in the dynamics of aphasia cannot be undermined, hence it becomes important to consider the age of onset. The age of onset is dependent on the causative factor leading to aphasia (stroke, TBI, tumors etc.) as the age of onset can vary across these conditions.

As per the survey carried out at by Kissela etal [4]in The Greater Cincinnati/Northern Kentucky region is concerned, the mean age at stroke significantly decreased from 71.2 years in 1993/1994 to 69.2 years in 2005. This particular study highlights that in the 90's the age of onset was considered to be seen in the seventh decade of life, in a span of 10 years, the age of onset was shifted by 2 years according to this study. In other prevalence study carried out by Edzie etal in 2021 [5] at the city of Ghana, the age of onset was considered to be 61.47 ± 13.36 years for males and 63.41 ± 15.41 years. Stroke in younger individuals was considered as an exception in the 90's and 2000's, however this notion has changed in the recent years The prevalence of stroke in individuals below 50 years is known to account for 15-20% of overall stroke percentage [6]. A recent meta-analysis carried out addressing stroke in younger individuals reports gender effect. Women were more vulnerable to develop stroke especially of ischemic type. Pre-menopausal women were more vulnerable to develop atherosclerotic disease compared to post-menopausal women [7]. In low to middle countries, an alarming rise of stroke in younger individuals was reported and the study attributes factors like smoking, drinking, lack of exercises and other factors to have caused stroke. These factors are considered to be the conventional factors leading to aphasia while the recent studies shows other causative factors such as migraine, use of oral contraceptives on a regular basis and recreational drug use as some of the causes of Aphasia. Even though specific facts and figures are not available exclusively in Indian context, the same facts and figures available world-wide would apply to Indian context as well. The upward shift in the age of onset can be observed in TBI also as the rate of road traffic accidents is considered to be more in younger individuals. Tumours can be seen in individuals of any age for that matter and even younger individuals may succumb to it. These factors should enable us to introspect on the current life style and adapt preventive strategies for curbing the rate of stroke, TBI and tumours leading to stroke and further causing aphasia. Hence it is important to tune our mind-set related to prevalence of conditions and be vigilant

References

1. Hallowell, B. & Chapey, R. (2008). Introduction to language intervention strategies in adult aphasia. In R. Chapey (Eds.), Language intervention strategies in aphasia and related neurogenic communication disorders (pp. 3-19). Philadelphia, PA: Lippincott Williams & Wilkins
2. MacDonald, S. (2017). Introducing the model of cognitivecommunication competence: A model to guide evidence-based communication interventions after brain injury. Brain Injury, 31(13- 14), 1760-1780

3. Griffiths D, Sturm J. (2011). Epidemiology and etiology of young stroke. *Stroke Res Treat.* :209370. doi: 10.4061/2011/209370
4. Kissela, Brett M et al. (2012). "Age at stroke: temporal trends in stroke incidence in a large, biracial population." *Neurology* vol. 79,17: 1781-1787. doi:10.1212/WNL.0b013e318270401d
5. Edzie, Emmanuel Kobina Mesi et al. (2021). "Incidence rate and age of onset of first stroke from CT scan examinations in Cape Coast metropolis." *Heliyon* vol. 7,2 e06214. 11 Feb. doi:10.1016/j.heliyon.2021.e06214
6. Bukhari, S., Yaghi, S., & Bashir, Z. (2023). Stroke in Young Adults. *Journal of clinical medicine*, *12*(15), 4999. https://doi.org/10.3390/jcm12154999
7. Takeshita, S., Ogata, T., Arima, H., & Tsuboi, Y. (2021). Proposed definition for young-onset ischemic stroke according to its cause. *Clinical neurology and neurosurgery*, *204*, 106595. https://doi.org/10.1016/j.clineuro.2021.106595

DOI:10.31579/2690-1897/196