

Disconnection

Ahmed Obeidat, MD, PhD

Perm J 2016 Summer;20(3):15-165

E-pub: 06/17/2016

<http://dx.doi.org/10.7812/TPP/15-165>

It was a very familiar object that I asked her to identify. She started to look, feel, think, and she said, “It has buttons, numbers, and glass, but I cannot put them together, I am unsure!” I then pushed a button and asked again. With an assertive voice, she said, “It’s a radio.” I asked, “What else could it be?” With a tentative voice, she said, “A video player?” I whispered, “You are so close, it’s a television.”

Then, I asked her to identify numbers. She said “four” instead of “three” and “one” instead of “five.” Despite her confidence, her answers appeared random. I asked her to read the letters of my name as spelled on my hospital ID. She spelled “TLOPZ” for “AHMED”; no pattern that I could identify. I then pointed to my black jacket and asked her to identify what it was, including what color. She said, after a thoughtful pause, “I have seen it before, but I am unsure.” She started to cry but then felt my jacket with her hand and readily said, “Oh, it’s your jacket, and it is blue.” The last task I asked her to perform was to write a sentence. I was thrilled that she wrote in beautiful script, “Doctor, I want to know what is wrong with me.”

Yes, this was alexia (word blindness), without agraphia, associated with color anomia and visual/color agnosia (the inability to interpret visual information and color). All implied a disconnection tragedy in her young brain. She was a creative writer in her third decade of life who had battled lupus and antiphospholipid syndrome for 12 years. Now her disease ravaged her left visual cortex and further interrupted the connection between her intact right occipital lobe and the dominant hemisphere, leaving her blind to her own words. Apart from alexia, anomia, and visual agnosia, she had no other language problems; she was able to express her ideas in speech and in writing, and could fully comprehend spoken English. I quantified her deficits using the National Institutes of Health stroke scale assessment.¹ Though the examination earned her only 2 points, 1 for the field cut, and 1 for the naming difficulty, her disability was beyond what this scale could convey. Nevertheless, her coming to our attention after a day of symptoms precluded the use of a clot buster medication. She was praying that her difficulties represented migraine with visual disturbances. But symptoms lasted longer than they should and her ophthalmologist asked her to go to the Emergency Department to be evaluated. I wondered whether an early arrival might have made me consider treating with tissue plasminogen activator despite her low stroke scale assessment score.

I feel safe carrying the stroke scale card in my pocket daily; it reflects an inventory of brain functions that makes such a complicated machine comprehensible and under control. The naming page reminds us to look for subtleties. Being able to name glove, key, chair, cactus, feather, and hammock can be very reassuring, whereas losing that ability is worrisome. Moreover, being able to tell the story of the inattentive mother and her sneaky kids reaching for the cookie jar helps us ferret out the elusive signs of language and speech disorders. But, it is challenging to diagnose alexia

without agraphia; it may pass unnoticed. Sometimes, even if observed, it can still be overlooked and blamed on its frequent fellow traveler, “homonymous hemianopia.” Alexia without agraphia is very disabling, very frustrating, and much more important than its corresponding low stroke scale assessment score. The sum total of our decision to treat or not weighs what we can’t always capture by a number. The decision to treat or not emphasizes the concept of art in our daily practice of medicine.

Several months after the event, she lives with her loving parents; she is gradually coping with her loss. I talked to her again but this time away from the Emergency Department.

She said, “I lost some capabilities. For example, I am not driving anymore: it is hard to read the signs or even follow the navigation system directions. Occasionally, I ask for help when I want to dress for an important event. Otherwise, a perfectly matching outfit means little to me. I believe in the beauty of each color and the beauty of each soul.” I then asked about her writing. She looked at me and smiled. She said, “I still enjoy writing and I love it even more now! I write on my small notebook and then listen to my mother’s voice carrying my own words; she reads them out loud, once, twice, three times and sometimes even more; I enjoy and then refine!” She went on to say, “I feel that I am learning again. I believe that my perception and my ability to read are going to eventually come back, but I also know that it might be long before that moment arrives!”

During that visit, I asked her to read some simple sentences; I was so excited to observe her success. She was able to read a few letters and some simple words. Although it was still difficult for her to name the colors or group them on the basis of their similarities, she made some improvement. I can see her young, talented brain marching on the path to recovery perhaps through a “detour” bypassing the “disconnection.”

Finally, by observing her voyage, I gained significant insight into the intricacies of brain connections, and most importantly, the consequences of such seemingly minor deficits in a person’s life. ❖

Disclosure Statement

The author(s) have no conflicts of interest to disclose.

Acknowledgment

The author would like to thank Alberto Espay, MD, MS, and Rhonna Shatz, MD, for comments on an earlier draft of this article.

How to Cite this Article

Obeidat A. Disconnection. Perm J 2016 Summer;20(3):15-165. DOI: <http://dx.doi.org/10.7812/TPP/15-165>.

Reference

1. NIH stroke scale [Internet]. Bethesda, MD: National Institute of Health, National Institute of Neurological Disorders and Stroke; 2013 Dec [cited 2016 Mar 3]. Available from: www.ninds.nih.gov/doctors/stroke_scale_training.htm

Ahmed Obeidat, MD, PhD, is a Resident in Neurology at the University of Cincinnati in Ohio. E-mail: ahmed.obeidat@uc.edu