



Letter to the Editor

Schizophrenia and subcortical aphasia—A pictorial analogy?



Dear Sir,

Schizophrenia or formal thought disorder (FTD) is consistent with the diagnosis of schizophrenia, albeit not pathognomonic (Ray and Ram, 2012). When present, it has been tied to negative symptom domain, frontal executive dysfunction, poor therapeutic response (both pharmacotherapy and ECT), chronicity, and schizotaxia in relatives of schizophrenia probands (Radanovic et al., 2013).

Speech of schizophrenics bears striking resemblance to that of left-sided thalamic (subcortical) aphasias (Strik et al., 2017). This might provide a neural substrate to schizophrenia. There does not seem to be a clear association between language and cognitive domains in psychotic patients which is analogous to what is typically seen in aphasic patients. Aphasic patients do have speech/language difficulties reflecting disruption of neural pathways subserving language. Cognitive problems also occur in aphasic patients and do contribute to language deficits but do not cause the bulk of their language problems.

Speech in subcortical aphasia is characterized by initial mutism and non-fluency followed by adequate fluency but with paucity of speech. There would be diminution of spontaneous speech, dysarthria but with intact repetition and intact naming. Also, there might be phonemic and semantic paraphasias. Characteristically, auditory comprehension is intact with lexical anomia and impaired lexical-semantic processing.

Similarly, speech in schizophrenia (Roche et al., 2015) is characterized by *decreased spontaneity*. Speech is induced. It is *fluent* in spite of *paucity*. Patient is taciturn, reticent, and secretive with skimpy, truncated answers. Telegraphic or texting speech is common. There would be *intact auditory comprehension*. *Repetition* ('No ifs, and, or, buts') is *intact*. Patients usually make *adequate use of polysyllabic words*. There might be *mild lexical anomia* with only mild word-finding difficulties. Notably, speech is described as empty or woolly speech conveying little information, if any, reflecting sterile thought content, typically impoverished which goes in tandem with negative thought content. *Out-of-class semantic paraphasia* with idiosyncratic or private usage of words might be encountered. Characteristically, *circumlocutory speech* is seen where the patient refers to an object by descriptive terms. *Elliptical speech* can also be detected, which is fluent and mostly syntactically normal but skirts the topic rather than getting to the point or straying from it as in flight-of-ideas. *Non-sequitur speech* has been described and is referring to the patient uttering unrelated responses to examiner's questions. Intermittent use of *neologisms*, paraphasia, *portmanteau words*, strings of jargon, derailed, *cataphasia* are all commonplace. Neologisms are new words that do not convey meaning. Portmanteau is a satchel. It is a neologism constructed from two or more words. *Jargon or drivelling speech* is where meaning is lost. *Derailement or knight moves* refers to sudden disrupted switch from one line of thought to a new parallel line of thought, at times refers to loosening of associations. Cataphasia is

verberation and can sometimes be grouped with signs of catatonia.

Semantic dissociation characterizing FTD in schizophrenics, where distortion between symbol and meaning can be readily noted has been described in phases. *Enlargement of semantic halo* is where language becomes ambiguous, vague, and indeterminate. In *semantic distortion*, there could be transfer of meaning to a new symbol (*neologism*) or to another word (*paralogism*). Meaning is largely reduced, and language becomes progressively incoherent, agrammatical and asyntactic in *semantic dispersion*. *Semantic dissolution* designates complete loss of meaning and communication. Language is then automatic.

As such, the construct of FTD as a form of aphasia, concords with the current understanding of cognitive neurolinguistics, might inform insights for neural models of FTD and ultimately hopefully usher a new sparkle in the psychopharmacotherapy of schizophrenia that target this symptom domain on the long journey to recovery.

Conflict of interest

Authors declare no competing interests.

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