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Letter to the Editor

Artistic activity from health through disease, then death in a patient with frontotemporal dementia



Keywords:

Artistic activity

Death

Frontotemporal dementia

The development of artistic capabilities in patients with a temporal variant of frontotemporal dementia (FTD) is a known subject [1]. On the other hand, it has been shown that those who possess artistic capabilities (especially painting) before being afflicted with FTD may experience fundamental changes in painting style and subject matter [2]. However, no study has yet evaluated the course of painting style changes in patients with FTD from before developing this disease. The evaluation of the decline in these skills and their changes in the course of time along with the disease progress can help us to reach a better understanding of the disease and the effect of neurological disorders on artistic capabilities.

The patient whose paintings are discussed here was an amateur painter before he developed FTD. His paintings were mostly about nature (Fig. 1A). After developing FTD at the age of 54, the style and subject of his paintings changed and mostly included a series of abstract patterns or completely deformed faces (Fig. 1B). In this stage on neuropsychological testing, memory and spatial visual perception were almost normal. The signs and symptoms of the disease were limited. He was no more interested in doing crossword puzzles and had difficulty finding appropriate words while speaking.

With the disease's progression, the patient's speech deteriorated gradually. Neurological tests exhibited some degrees of disorders in the immediate memory and spatial visual perception.

The precision of his paintings decreased as they exhibited fewer details and the canvas was mostly filled with colors (Fig. 1C). As the patient approached the end of life, the cognitive disorders became more apparent. He progressively lost his speech and disorders in memory and spatial visual perception became more evident. He also lost the ability to learn in a progressive manner.

In addition, the details of the paintings decreased. Finally, his paintings were purposeless coloring of the canvas (Fig. 1D).

1. Discussion

Although a temporal variant of FTD is considered an isolated disorder of the speech [3], studies show that about 50% of FTD patients develop dementia and experience deficits in other cognitive areas [3]. Our patient also developed dementia as well as deficits in other cognitive areas such as visuospatial skills and attention. The dementia could have also affected the artistic capabilities of our patient. We already knew the artistic capabilities and characteristics of patients with Alzheimer's disease (AD) (a disease characterized by dementia) are different from FTD patients as the paintings of the former group exhibit fewer details and less order [4]. Moreover, over the course of time, the quality of the paintings dramatically declined [4]. It is possible that with the involvement of other cognitive areas in FTD patients and the development of dementia, the paintings become more similar to the paintings done by patients with AD, which was the case for our patient. The paintings by our patient after development of FTD had similar characteristics of other patients: bizarre and non symbolic patterns with deformed faces [4]. However, the details of the paintings gradually decreased and they lost their attraction. Finally, his paintings were only purposelessly colored canvas. The only feature that our patient sustained to the end was that he craved painting, which is known as "compulsion in artistic activity" in FTD patients [5].

The aforementioned case indicates the differences and similarities of artistic activities in patients with FTD and AD. In the early stages of FTD, the pattern of creativity changes due to pathological and neuropsychological changes, resulting in producing the extraordinary and attractive works. It seems that the onset of the disease results in a step forward in artistic capabilities of the patients. However, along with the decline in neuropsychological capabilities that occurs in the course of time, the quality of the artistic works are declined and they lose their attractiveness to the patient and become even

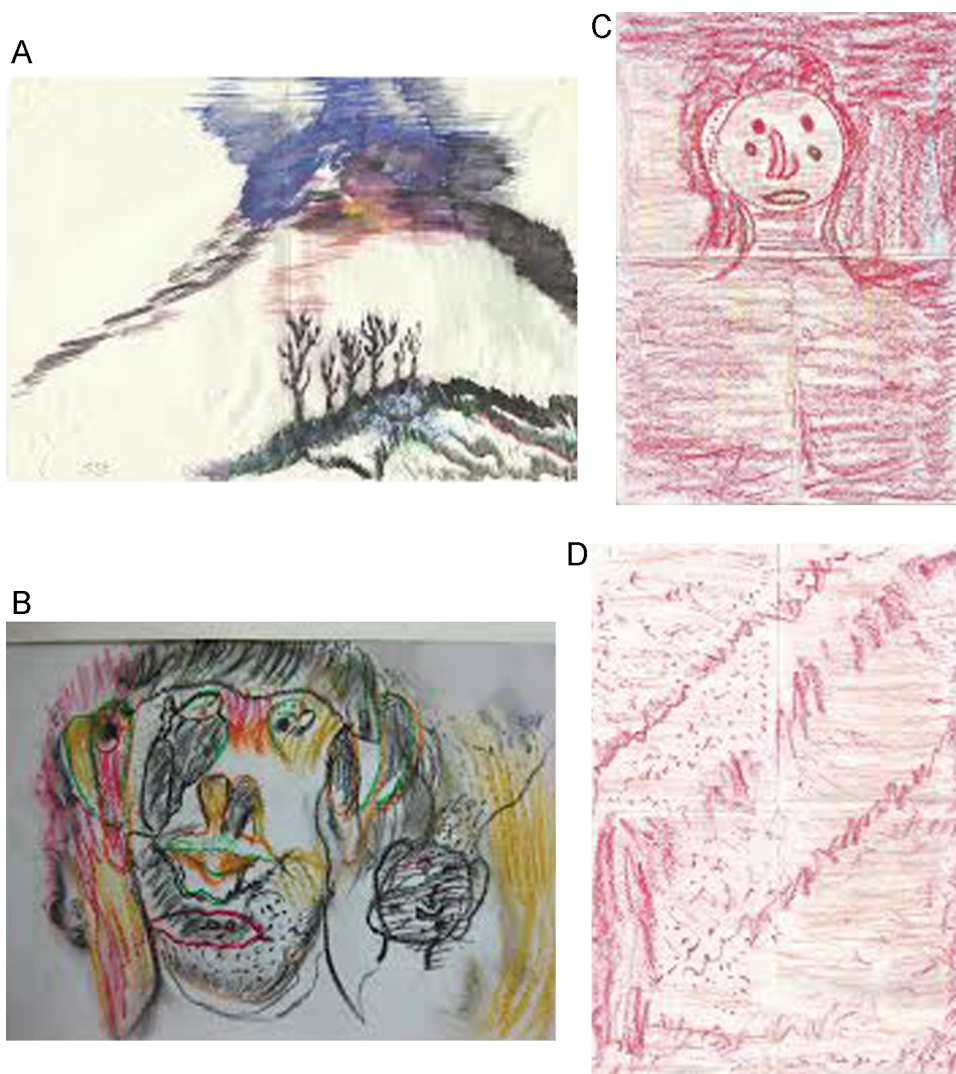


Fig. 1 – A: one of the paintings of our patient before developing FTD. B: deformed faces and displacement of the facial features as one of the motifs of his painting after developing FTD. C: the details of the paintings decreased and the canvas was mostly filled with colors as the disease progressed. D: his last paintings were only purposelessly colored canvas. (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)

simpler. On the other hand, in patients with AD, the quality of the art works shows a decrease from the onset of the disease along with the neuropsychological decline and they become simpler gradually in the course of time with fewer and fewer details.

In conclusion, neuropsychological changes of FTD can lead to increased creativity in early stages of disease. However, this phenomenon is not seen in AD.

Conflict of interest

The author declares that there is no conflict of interest.

Acknowledgment and financial support

The author declares that there is no financial disclosure.

Ethics

The work described in this article has been carried out in accordance with The Code of Ethics of the World Medical Association (Declaration of Helsinki) for experiments involving humans; Uniform Requirements for manuscripts submitted to Biomedical journals.

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Received 29 June 2015

Accepted 5 September 2015

Available online 16 September 2015

<http://dx.doi.org/10.1016/j.pjnns.2015.09.004>
0028-3843/

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