Published online 2016 January 1.

#### Letter

# Typical Absence Seizure Similarity to "Shokhous" in Iranian Traditional Medicine

## Somaye Ahmadbegi<sup>1</sup> Ali Akbar Jafarian<sup>2,\*</sup> Jale Aliasl<sup>3</sup> and Ali Rostami<sup>4</sup>

<sup>1</sup>Department of Iranian Traditional Medicine, School of Traditional Medicine, Tehran University of Medical Sciences, Tehran, IR Iran Department of Anesthesiology, Research Institute for Islamic and Complementary Medicine (RICM), Iran University of Medical Sciences, Tehran, IR Iran

<sup>4</sup>The Research Institute for Islamic and Complementary Medicine, Iran University of Medical Sciences, Tehran, IR Iran

\*Corresponding Author: Ali Akbar Jafarian, Department of Anesthesiology, Research Institute for Islamic and Complementary Medicine (RICM), Iran University of Medical Sciences, Tehran, IR Iran. Tel: +98-2133977966, Fax: +98-2133116726, E-mail: ajafari41@gmail.com

Received 2014 June 14; Revised 2014 July 28; Accepted 2014 September 1.

Keywords: Absence Seizure, Iranian Traditional Medicine, Shokhous

### Dear Editor,

In allopathic medicine, absence seizure is a kind of generalized seizure characterized by sudden, brief lapses of consciousness without loss of postural control (1, 2). Typical absence only lasts for a few seconds and consciousness returns suddenly as it was lost, without postictal confusion (3).

"Shokhous" or "Jomoud" in Iranian traditional medicine is a disease in which patients suddenly lose their sensations and movements and they look as if they are slept. The patients keep their posture and their eyes open or close the same as before attack, but usually are open and fixed.

If you talk to them, they do not understand or respond. Feeding or awakening them is impossible even by force. These attacks occur in a short time (4). According to the Avicenna, sensations completely vanish, but movements remain, because patients can breathe normally (5).

In Iranian traditional medicine, "Shokhous" is not classified as a kind of seizure but as a sleep disorder (4).

"Shokhous" signs are similar to signs of typical absence seizure, therefore, they might be the same disease; however, in absence seizure diagnosis, EEG is an important criterion (2, 6), and there was not EEG in ancient age.

In most traditional medicine references, "Shokhous" is caused by a "soddeh" (meaning obstruction), in the posterior ventricle placed in the back part of brain. The substance known as "soda" (black bile) leads to this obstruction (4).

According to Iranian traditional medicine, there are 4 basic qualities in body elements: warmth, coldness, moisture, and dryness (5).

The body is composed of 4 humors (blood, phlegm, yellow bile, and black bile) and its health is based on the right proportion and specific balance of humors according to their quality and quantity. Each of them is similar to one of the 4 elements (air, water, fire, and earth) in the temperament and its activity. The black bile is similar to earth element and has some characteristics like stability, rigidity, and hardness. Black bile is divided into two categories: normal black bile and abnormal black bile. Any decrease of normal black bile in the body leads to rise in abnormal black bile, which causes a disorder (7, 8).

In "Shokhous," abnormal black bile rises in the brain and causes higher than normal dryness and coldness (4). Differential diagnosis of "Shokhous" in Iranian traditional medicine comprises the following diseases:

1. "Sar" (tonic-clonic seizure): The attack of "Sar" causes patients to squirm and produce convulsive movements; but "Shokhous" does not cause movement, on the contrary, it stops body movements for a few seconds.

2. "Sobat" (stupor): In "Sobat," eyes are closed, it does not start and finish suddenly. The patient takes time to return to its normal state, and we can force the patient to understand or talk during "Sobat." On the contrary, in "Shokhous" eyes are often open, it starts and finishes abruptly, it lasts a short time and if you talk to them, they do not understand or answer.

3. "Sadare khaderi" (orthostatic hypotension): Dizziness unlike "Shokhous" is the main symptom of this disease.

4. "Sekte" (stroke): Unlike "Shokhous," force-feeding is possible in "Sekte."

5. "Sarsame bared" (a kind of meningitis): Patients can move eyes, close eyelids, change the posture, even speak a little, and there is fever in this disease but none of these signs and symptoms are reported in the "Shokhous" attack (4).

### Treatment

In the allopathic medicine, valproic acid, ethosuxsimide, and lamotrigine are the drugs of choice to control absence seizures (9,10).

Copyright © 2016, Iranian Red Crescent Medical Journal. This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (http://creativecommons.org/licenses/by-nc/4.0/) which permits copy and redistribute the material just in noncommercial usages, provided the original work is properly cited.

In Iranian traditional medicine, treatment is divided into two parts: prevention and therapy. Prevention consists of not eating some foods like eggplant, marinades, mushroom, and cabbage which produce more "soda" in the patient's body.

Therapy comprises enema with herbals such as "aftymoun" (Cuscuta epithymum), "basfayej" (Polypodium vulgare), "halile" (Terminalia chebula), and "ghariqoun" (Polyporus officinalis). According to the Iranian traditional medicine, these plants are used because of their special ability to extract "soda." Also enema is more useful to cleanup brain but this treatment is helpful when body is strong enough. If energy is insufficient, enema with "Mae nokhale" (water bran), "varaghe salgh" (beet leaf), and dissolved oil, something like "booragh" (a kind of mineral), and "shahme hanzal" (Citrullus colocynthis) or other "ayarajate moshele" soda that are usable to extract soda, are helpful (4).

According to this study, more research is suggested to assess the effect of this treatment in Iranian traditional medicine.

### Footnote

**Authors' Contribution:**Ali Akbar Jafarian studied the manuscript for important intellectual content and edited it. Jale Aliasl contributed to the development of the protocol and edited the manuscript.

### References

- Vrielynck P. Current and emerging treatments for absence seizures in young patients. *Neuropsychiatr Dis Treat*. 2013;9:963–75. doi:10.2147/NDT.S30991. [PubMed: 23885176]
- Panayiotopoulos CP. Typical absence seizures and related epileptic syndromes: assessment of current state and directions for future research. *Epilepsia*. 2008;49(12):2131–9. doi: 10.1111/j.1528-1167.2008.01777.x. [PubMed: 19049569]
- Blumenfeld H. Epilepsy and the consciousness system: transient vegetative state? *Neurol Clin.* 2011;29(4):801–23. doi: 10.1016/j. ncl.2011.07.014. [PubMed: 22032662]
- Kermani NI. Sharh Alasbab valalamat. Qom: Jalaledin; 2008. pp. 98-100.
- 5. Avicenna. Canon of medicine. Beirut Lebanon: Alaalami Library; 2005.
- Berg AT, Berkovic SF, Brodie MJ, Buchhalter J, Cross JH, van Emde Boas W, et al. Revised terminology and concepts for organization of seizures and epilepsies: report of the ILAE Commission on Classification and Terminology, 2005-2009. *Epilepsia*. 2010;51(4):676– 85. doi: 10.1111/j.1528-1167.2010.02522.x. [PubMed: 20196795]
- Choopani R, Mosaddegh M, Gir AA, Emtiazy M. Avicenna (Ibn Sina) aspect of atherosclerosis. *Int J Cardiol.* 2012;**156**(3):330. doi: 10.1016/j.ijcard.2012.01.094. [PubMed: 22357428]
- Emtiazy M, Keshavarz M, Khodadoost M, Kamalinejad M, Gooshahgir SA, Shahrad Bajestani H, et al. Relation between Body Humors and Hypercholesterolemia: An Iranian Traditional Medicine Perspective Based on the Teaching of Avicenna. *Iran Red Crescent Med J.* 2012;14(3):133–8. [PubMed: 22737569]
- Glauser TA, Cnaan A, Shinnar S, Hirtz DG, Dlugos D, Masur D, et al. Ethosuximide, valproic acid, and lamotrigine in childhood absence epilepsy: initial monotherapy outcomes at 12 months. *Epilepsia*. 2013;54(1):141–55. doi: 10.1111/epi.12028. [PubMed: 23167925]
- 10. Hwang H, Kim H, Kim SH, Kim SH, Lim BC, Chae JH, et al. Longterm effectiveness of ethosuximide, valproic acid, and lamotrigine in childhood absence epilepsy. *Brain Dev.* 2012;**34**(5):344–8. doi:10.1016/j.braindev.2011.08.007. [PubMed: 21893390]