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Treatment of Meniere's Disease with Persian Medicine: A Case Report

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Abstract

Introduction: Meniere's disease is one of the most common inner ear and vestibular disorders. Its conventional treatment gives unsatisfying results in some cases. This article introduces a patient with Meniere's disease who has been treated with Persian medicine.
Case Presentation: The patient was a 40-year-old woman, a known case of Meniere's disease, who was advised to consume cinnarizine and betahistine. Due to lack of satisfactory response to treatment, the patient referred to Persian medicine clinic. She followed the recommendations of Persian medicine and the disease was completely recovered.
Conclusions: Treatment of Meniere's disease in this patient was based on lifestyle modification, warming up the body, strengthening the brain and the nervous system, enhancing the digestive system, modifying the condition of defecation, and removing waste materials and accumulated humors from the body, especially the head. It is believed that this case report will provide a basis for further studies on the impact of Persian medicine on the treatment of Meniere's disease.

Keywords: Persian Medicine, Conventional Medicine, Meniere's Disease, Treatment

1. Introduction

Meniere's disease is one of the most common inner ear and vestibular disorders. It is defined as the idiopathic syndrome of endolymphatic hydrops. The symptoms of this disease are: true vertigo, loss of hearing, tinnitus, a feeling of fullness in the affected ear, loss of balance, headaches, nausea, and vomiting (1). Drug therapy such as cinnarizine, betahistine, etc., and sometimes surgical procedures are commonly used to control the symptoms of the disease. But the disease is recurrent and annoying to the patient (2, 3). Therefore, it is considerable to use complementary therapies along with conventional methods to treat this disease.

Persian medicine is a widespread and rooted science based on temperament and quadruple humors (blood, yellow bile, phlegm, and black bile) that has been preserved from great physicians and scientists such as Razes and Avicenna. The change in temperament and the quality and quantity of these humors is the basis of the disease in Persian medicine and temperament adjustment is the main principle of treatment (4). This article introduces a patient with Meniere's disease who was treated with Persian medicine.

2. Case Presentation

The patient was a 40-year-old woman, a known case of Meniere's disease from two years ago. She was advised to consume cinnarizine and betahistine daily. These medications reduced the symptoms for a short time (1 - 2 months), but then, despite continuing the drugs, the disease recurred. Due to lack of satisfactory response to treatment, the patient referred to Persian medicine clinic. In the first visit to Persian medicine, the patient stated that vertigo attacks occur 2 to 3 times a week and lasts 24 hours each time. During this period, the patient did not have a good balance in walking and vertigo was felt even with closed eyes. She also had headache, heavy head feeling, left ear tinnitus, nausea, and vomiting. Cold weather hurts the patient and vertigo and other symptoms increased in the fall and winter and reduced in the spring and summer. The patient complained of exacerbation of the post nasal discharge in the fall and winter and noted persistent fatigue and drowsiness in these two seasons.

During examination, she seemed to be overweight and her movements were relatively slow and with weakness. The patient's skin was cold and slightly damp. The pulse was also weak. The patient did not mention another disease. Menstruation was normal.

She was advised to observe the following:

- To note the eating and drinking measures of Persian medicine, such as avoiding the use of drinks, fruit or salad by the meal, avoiding sleep immediately after the meal, good chewing of the meal and eating quietly.

- Avoid consuming cold tempered foods and drinks (especially cold and damp) such as yogurt, dough, cucumber, lettuce, etc.

- To add hot and dry tempered spices like cumin (*Cuminum cyminum*) and saffron (*Crocus sativus*) to foods

- To drink water and honey

- To add grape (*Vitis vinifera*) extract to the diet

- To drink almond milk (15 raw peeled almond (*Prunus dulcis*) with a glass of water and a teaspoonful of honey mixed in a blender, 3 cups daily

- To eat 20 currant (*V. vinifera*) and 7 dried fig (*Ficus carica*) per day.

- To eat royal jelly 0.5 g per day with honey.

The oral medication prescribed to the patient was:

- A decoction of a teaspoonful of chamomile (*Matricaria chamomilla*) 3 times a day.

- "*Ostokhodoos*" capsule twice a day

- "*Phlegm*" tablet 3 times a day after meal

- "*Rahat*" capsule daily

Other measures:

- Massage the forehead, around the ears and neck from top to bottom with chamomile (*M. chamomilla*) oil 100 times every day

The patient was referred one month after taking medications. She stated that during the start of vertigo and nausea, she started taking Persian medication and after 2 to 3 h, vertigo and nausea were resolved. While continuing medication, headache, tinnitus, imbalance, and other symptoms were resolved in 2 weeks. During the patient's examination, she seemed fresher than before and her pulse was strong. She was advised to continue the medication with previous instructions and discontinue cinnarizine and betahistine.

Third visit was 2 months later. The patient stated that she had no symptoms during the last 2 months. Post nasal discharge was significantly reduced and fatigue and drowsiness were completely eliminated. Concerning improvement in symptoms, the patient was advised to gradually reduce and stop the medication within 2 months.

She was referred one month after discontinuation of the medication, while she was fresh and had no complaint of the disease.

Currently, 13 months have passed since the last referral of the patient, and during follow-up, no symptoms of the disease were found.

3. Discussion

As stated earlier, Meniere's disease is an invalidating illness characterized by attacks of vertigo with hearing loss, tinnitus, and/or aural fullness of the affected ear. Its conventional treatment gives unsatisfying results in some cases (5). The patient in this study sought Persian medicine because of the lack of improvement with conventional treatment. From the perspectives of Persian medicine, the patient's general appearance (such as obesity, pale, cold and moist skin, slowness of movement, drowsiness, cold intolerance, and exacerbation of symptoms in cold seasons) shows symptoms of cold and wet dystemperament. On the other hand, the patient complained of post nasal discharge and its exacerbation in the fall and winter, which Persian medicine considers it as a "*Cold Nazlah*" and abnormal accumulation of phlegm and causative pathologic substances in the brain (6-11). Therefore, it is believed that in this patient, pathologic substances of the brain poured down to the left ear, causing vertigo, tinnitus, and other symptoms. The therapeutic process of this disease in Persian medicine, is correcting the dystemperament with lifestyle modification, by purifying the body, especially the brain, from waste phlegm and strengthening the brain to prevent the re-accumulation of causative pathologic substances. On the other hand, since in Persian medicine treatment is against the disease temperament, such that in this patient with phlegm dominance (cold and wet dystemperament), heat-generating and excessive moisture absorbing medications should be used. Another important point is that production of the quadruple humors is performed through the digestive system and liver, so the function of these two organs should be normal in order to generate good and beneficial humors (6-11). Therefore, improvement of the digestive system should be considered in the treatment method adopted for this patient. Generally, eating and drinking modification and adding some foods including almonds (*P. dulcis*), honey, grape (*V. vinifera*) extract, currants, dried figs (*F. carica*), cumin (*C. cyminum*), saffron (*C. sativus*) and royal jelly to the diet were prescribed. Along with the nutritional adjustment, the use of chamomile (*M. chamomilla*) decoction, "*Ostokhodoos*" capsules, "*Phlegm*" tablets, and "*Rahat*" capsules were also recommended.

The modification of eating and drinking will improve the digestion and produce less waste material in the body (6-11). In addition, avoiding the consumption of cold and wet tempered foods and drinks (such as yogurt, dough, cucumber, and lettuce) and adding hot tempered foods (such as cumin, saffron, and grape extract) to the diet prevent the production of abnormal phlegm and further degrades excessive moisture. Almonds, saffron, and royal

jelly boost the body's strength to fight disease and eliminate causative pathologic substances as much as possible. From the perspective of Persian medicine, almonds and saffron, both strengthen the brain and improve post nasal discharge, preventing excessive accumulation of causative pathologic substances in the ear (12-14). Oral medications also improve the treatment process with the earlier mentioned mechanisms. Ingredients of oral medicines are shown in Table 1.

Table 1. Ingredients of the Combined Oral Drugs Prescribed to the Patient (14)

Drug Name	Ingredients
Chamomile decoction	Chamomile (*Matricaria chamomilla*) honey
"*Ostokhodoos*" capsules	Lavender (*Nepeta menthoides*), Coriander (*Coriandrum sativum*), Marjoram (*Origanum majorana*), Chebulic myrobalan (*Terminalia chebula*), Indian frankincense tree (*Boswellia carteri*) gum
"*Phlegm*" tablets	Black cumin (*Nigella sativa*), Ajwain (*Trachyspermum ammi*), Thyme (*Thymus vulgaris*), Mastic (*Pistacia lentiscus*) gum
"*Rahat*" capsules	Rhubarb (*Rheum officinale*), Aloe (*Aloe vera*), Chebulic myrobalan (*Terminalia chebula*)

In Persian medicine, it is believed that chamomile strengthens the brain and purifies the body, especially the brain, from causative pathological substances. It is also useful for treatment of post nasal discharge, degrading the accumulated pathologic substances in the ear. The unique property of chamomile is that when waste materials were extracted from an organ, it does not permit the re-accumulation of them in that organ. Combination of chamomile with honey improves its function in the body and prevents the side effects of the plant (12-14).

"*Ostokhodoos*" capsule is composed of lavender (*Nepeta menthoides*), coriander (*Coriandrum sativum*), marjoram (*Origanum majorana*), mastic (*Pistacia lentiscus*) gum, chebulic myrobalan (*Terminalia chebula*), and Indian frankincense tree (*Boswellia carteri*) gum. Lavander (*N. menthoides*) is a tonic of the whole body, especially the heart and brain. The special function of lavander is to cleanse abnormal phlegm and black bile from the brain. Thus, it increases the power of thinking and memory and it is also very helpful in removing post nasal discharge. Coriander prevents the negative effect of stomach dystemperament on the brain and through this mechanism it acts as an antivertigo herb. Marjoram, mastic, and boswellia cleanse the brain from excessive phlegm and pathologic humors, and by strengthening the brain, it prevents the re-accumulation of pathological substances. Mastic also effectively cleans the ear. Mastic and boswellia, when mixed together, are a potent gastrointestinal enhancer and moderator of its dystemperament (12-14).

"*Phlegm*" tablet is composed of black cumin (*Nigella sativa*), ajwain (*Trachyspermum ammi*), thyme (*Thymus vulgaris*), and mastic (*P. lentiscus*) gum. All of the ingredients of this tablet improve digestive system and prepare the abnormal phlegm to remove from the body. Mastic excretes excessive phlegm and moisture from the brain (12-14) which is very important in this patient.

"*Rahat*" capsule is composed of rhubarb (*Rheum officinale*), aloe (*Aloe vera*), and chebulic myrobalan (*T. chebula*). The ingredients of this drug prepare the abnormal and pathologic humors which were removed from the brain and ear by other drugs, to excrete from the body. They also have laxative effect and emit waste substances via the stool. The three compounds are also brain tonic and *T. chebula* is specifically used to correct the brain dystemperament and improve vertigo (12-14).

There are also some evidences in conventional medicine articles about the positive effects of some of the prescribed medicinal herbs on the hearing system and central nervous system (CNS). Saffron is neuroprotective and CNS tonic (15), and is also used in combination with Chinese medicine drugs for treatment of inner ear diseases (16). Royal jelly, grapes, and figs are also reinforcing the brain and the nervous system (17-20). The positive effects of cumin (*C. cyminum*) and black cumin (*N. sativa*) on the treatment of vertigo, sinusitis, and post nasal discharge are expressed in numerous articles (21, 22). Coriander is also used in Ayurveda as a CNS tonic to treat vertigo (23, 24). *B. carteri* and *N. menthoides* are also known to be effective in treating many neurological diseases (25-28).

The topical treatment recommended to the patient was massaging of the forehead, around the ears and neck from top to bottom with chamomile (*M. chamomilla*) oil. In addition to the properties mentioned for chamomile, Persian medicine believes that this type of anointment, can discharge pathologic humors from the head and it is very important to repeat it as stated (6-11).

Generally, treatment of Meniere's disease in this patient was based on lifestyle modification, warming up the body, strengthening the brain and the nervous system, enhancing the digestive system, modifying the condition of defecation, as well as the removal of waste materials and accumulated humors from the body, especially the head. While the conventional medicine treatment was not associated with the appropriate response, Persian medicine was successful. It is hoped that this case report will provide a basis for further studies on the impact of Persian medicine on the treatment of Meniere's disease.

References

1. Plontke SK, Gurkov R. [Meniere's Disease]. *Laryngorhinootologie*. 2015;**94**(8):530–54. German. doi: 10.1055/s-0035-1555808. [PubMed: 26243634].
2. Sood AJ, Lambert PR, Nguyen SA, Meyer TA. Endolymphatic sac surgery for Meniere's disease: A systematic review and meta-analysis. *Otol Neurotol*. 2014;**35**(6):1033–45. doi: 10.1097/MAO.0000000000000324. [PubMed: 24751747].
3. Teggi R, Gatti O, Sykopetrites V, Quaglieri S, Benazzo M, Bussi M. Association of cinnarizine and betahistine in prophylactic therapy for Meniere's disease with and without migraine. *Acta Otorhinolaryngol Ital*. 2014;**34**(5):349–53. [PubMed: 25709150]. [PubMed Central: PMC4299158].
4. Kenari HM, Kordafshari G, Aghighi S, Moghimi M. Treatment of a traumatic injury of hand with Persian medicine. *Archives Clin Biomed Res*. 2018;**2**(2):59–67. doi: 10.26502/acbr.5017042.
5. Bremer HG, van Rooy I, Pullens B, Colijn C, Stegeman I, van der Zaag-Loonen HJ, et al. Intratympanic gentamicin treatment for Meniere's disease: A randomized, double-blind, placebo-controlled trial on dose efficacy - results of a prematurely ended study. *Trials*. 2014;**15**:328. doi: 10.1186/1745-6215-15-328. [PubMed: 25135244]. [PubMed Central: PMC4141100].
6. Avicenna. *Qanun fi al tib. [Canon of medicine]*. **1**. Beirut: Ehyaol Toras al-Arabi Press; 2010. p. 263–4. Arabic.
7. Razes. *Al havi. [Liber continent]*. **1**. Beiruot: Ehyaol Toras al-Arabi Press; 2001. Arabic.
8. Jorjani I. *[Treasure of the Khwarazm Shah]*. **1**. Qom: Jalaleddin Press; 2011. Persian.
9. Kermani MK. Zia Ebrahimi I, editor. *Daqaeq-al alaj*. **1**. Kerman: Saadat Press; 1983. 225 p. Arabic.
10. Chashti MA. *Exir e azam. [Great elexir]*. **3**. 1st ed. Tehran, Iran: Research Institute for Islamic and Complementary Medicine; 2008. Persian.
11. Arzani MA. *Teb-e-Akbari. [Akbari's medicine]*. **1**. Qom: Jalaleddin Press; 2008. Persian.
12. Aghili Khorasani MH. Shams Ardakani MR, Rahimi R, Farjadmand F, editors. *Makhzan-ol-adviyah. [Storehouse of medicaments]*. Tehran: Tehran University of Medical Sciences; 2009. Persian.
13. Tonekaboni HM. Shams Ardekani MR, Rahimi RF, editors. *Tohfat al momenin. [A gift for the faithful]*. Research Center of Traditional Medicine. Shahid Beheshti University of Medical Sciences. Nashre Shahr Press; 2007. Persian.
14. Aghili Khorasani Shirazi MH. *Qarabadin-e-kabir. [Great pharmacopeia]*. Mahmoudi Press; 1970. Persian.
15. Samarghandian S, Azimi-Nezhad M, Samini F. Ameliorative effect of saffron aqueous extract on hyperglycemia, hyperlipidemia, and oxidative stress on diabetic encephalopathy in streptozotocin induced experimental diabetes mellitus. *Biomed Res Int*. 2014;**2014**:920857. doi: 10.1155/2014/920857. [PubMed: 25114929]. [PubMed Central: PMC4119909].
16. Yunjiang C. [Treatment of dantan dingxuan yin combined western medicine treatment of inner ear vertigo random parallel control study]. *J Pract Tradit Chin Int Med*. 2013;**2**(48). Chinese.
17. Lakshmi BV, Sudhakar M, Anisha M. Neuroprotective role of hydroalcoholic extract of Vitis vinifera against aluminium-induced oxidative stress in rat brain. *Neurotoxicology*. 2014;**41**:73–9. doi: 10.1016/j.neuro.2014.01.003. [PubMed: 24486960].
18. Bhanushali MM, Makhija DT, Joshi YM. Central nervous system activity of an aqueous acetonic extract of Ficus carica L. in mice. *J Ayurveda Integr Med*. 2014;**5**(2):89–96. doi: 10.4103/0975-9476.131734. [PubMed: 24948859]. [PubMed Central: PMC4061596].
19. Mohamed AA, Galal AA, Elewa YH. Comparative protective effects of royal jelly and cod liver oil against neurotoxic impact of tartrazine on male rat pups brain. *Acta Histochem*. 2015;**117**(7):649–58. doi: 10.1016/j.acthis.2015.07.002. [PubMed: 26190785].
20. Pyrzanowska J, Piechal A, Blecharz-Klin K, Joniec-Maciejak I, Graikou K, Chinou I, et al. Long-term administration of Greek royal jelly improves spatial memory and influences the concentration of brain neurotransmitters in naturally aged Wistar male rats. *J Ethnopharmacol*. 2014;**155**(1):343–51. doi: 10.1016/j.jep.2014.05.032. [PubMed: 24882731].
21. Yoruk O, Tatar A, Keles ON, Cakir A. The value of Nigella sativa in the treatment of experimentally induced rhinosinusitis. *Acta Otorhinolaryngol Ital*. 2017;**37**(1):32–7. doi: 10.14639/0392-100X-1143. [PubMed: 28374868]. [PubMed Central: PMC5384307].
22. Ediriweera ER, Rathnayaka RL, Premakeerthi WM, Weerasinghe KD. Efficacy of Sri Lankan traditional decoction of katuwelbatu deduru katukadi in treatment of kaphaja shira shula (chronic sinusitis). *Ayu*. 2010;**31**(1):58–61. doi: 10.4103/0974-8520.68208. [PubMed: 22131686]. [PubMed Central: PMC3215323].
23. Ravindran A, Manohar VR, Rai M, Rraveendran N, Naik H. Chronic anxiolytic-like activity of aqueous extract of Coriandrum sativum seeds using elevated plus maze test in Swiss albino mice. *Int J Pharm Pharm Sci*. 2014;**6**:93–5.
24. Bhat SP, Rizvi W, Kumar A. Coriandrum sativum on pain and inflammation. *Int j Res Pharm Chem*. 2014;**4**(4):939–45.
25. Hosseini-sharifabad M, Esfandiari E. Effect of boswellia serrata gum resin on the morphology of hippocampal CA1 pyramidal cells in aged rat. *Anat Sci Int*. 2015;**90**(1):47–53. doi: 10.1007/s12565-014-0228-z. [PubMed: 24515442].
26. Kirste S, Treier M, Wehrle SJ, Becker G, Abdel-Tawab M, Gerbeth K, et al. Boswellia serrata acts on cerebral edema in patients irradiated for brain tumors: A prospective, randomized, placebo-controlled, double-blind pilot trial. *Cancer*. 2011;**117**(16):3788–95. doi: 10.1002/cncr.25945. [PubMed: 21287538].
27. Ahmadian-Attar MM, Ahmadiani A, Kamalinejad M, Dargahi L, Mosaddegh M. Chronic cold-water-induced hypothermia impairs memory retrieval and nepeta menthoides as a traditional "hot" herb reverses the impairment. *Iran J Pharm Res*. 2014;**13**(Suppl):185–93. doi: 10.3923/pjbs.2012.1085.1089. [PubMed: 24711845]. [PubMed Central: PMC3977069].
28. Sarahroodi S, Jafari-Najafi R, Nasri S, Rohampour K, Maleki-Jamshid A, Esmaeili S. Effects of Nepeta menthoides aqueous extract on retention and retrieval of memory in mice. *Pak J Biol Sci*. 2012;**15**(22):1085–9. [PubMed: 24261125].