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# Nursing Care of a Patient With Vogt-Koyanagi-Harada Syndrome With Nystagmus

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**Abstract**

Through the nursing of a patient with Vogt Koyanagi-Harada syndrome with nystagmus, the nursing experience was summarized to make the nursing staff more fully understand the nursing methods of the patient with Vogt Koyanagi-Harada syndrome. Through comprehensive risk assessment of the patient, nurses formulate solutions, carry out nursing intervention, establish the patient's confidence and improve the patient's consciousness of medication. There were no complications during hospitalization, and preventive medication was still used according to the doctor's advice after discharge. At present, glucocorticoid is still the main drug for the treatment of Vogt Koyanagi Harada syndrome. The early sufficient treatment effect is good. Nurses can improve the drug compliance of patients adhering to formal treatment through effective nursing intervention, which can effectively prevent complications and significantly reduce disease recurrence.

**Keywords:** Vogt Koyanagi Harada syndrome, glucocorticoid, nursing intervention, compliance

## 1. Preface

Vogt Koyanagi Harada syndrome, also known as idiopathic uveal cerebritis, is a multisystem disease, a chronic granulomatous autoimmune disease mainly involving the eyes, nervous system, vestibule and skin (Bruno, M. G., Mc PS Jr., 1949). Early symptoms are not specific, and the incidence rate is low. There are individual differences between the specific eye symptoms and clinical evolution, which may lead to misdiagnosis and missed diagnosis. Clinically, most of them are bilateral uveitis, often accompanied by meningeal irritation, hearing impairment, abnormal skin and hair and other changes (Li, Y., 2021). In addition to the general symptomatic treatment, glucocorticoid is the first-line drug for the initial onset of VKH (Huang, G., 2017). It should be applied early, in sufficient amount and in full course, and the treatment time is more than half a year (Yao, L., & Fan, J.-X., 2019). If the early medication is not timely or correct, it will lead to varying degrees of vision loss and even blindness. Nystagmus is rare in vkhs. Vestibular involvement is considered in nystagmus (Gou, M.-B., 2021). On March 5, 2020, a patient with Vogt xiaoliuyuantian syndrome with nystagmus was treated in our department. The nursing staff formulated solutions and carried out nursing intervention through comprehensive risk assessment of the patient, so as to improve the patient's consciousness of medication and improve the patient's condition. The nursing experience is reported as follows:

## 2. Case Introduction

The patient, male, 49 years old, came to our department for treatment because his eyes were red, the vision of his right eye darkened for 3 weeks, his eyesight decreased for 1 week, accompanied by headache, scalp acupuncture, inability to touch the scalp, dizziness, tinnitus and weakness of both lower limbs. He was diagnosed as "Vogt Koyanagi-Harada syndrome". Specialist examination: right eye visual acuity 0.2, left eye visual acuity 0.12; Mild congestion of conjunctiva in both eyes; Posterior corneal KP of both eyes; Vitreous dust and strip opacity; The boundary of double optic discs was unclear, retinal edema in the posterior pole and the reflection in the macular area disappeared. Eye movement examination: horizontal tremor of both eyes. Auxiliary examination: OCT: bilateral macular serous retinal detachment; FFA: intense fluorescence of binocular optic disc and needle tip fluorescence of retina at posterior pole. MRI examination: mild ischemic white matter lesion and mild maxillary sinusitis on the left.

The patients were given Prednisone Acetate Tablets morning oral 60mg/ days after admission. Ranitidine was used to protect gastric mucosa and calcium carbonate $D_3$ for oral prevention of osteoporosis, oral potassium chloride, intermittent oral finfide analgesia, binocular atropine eye gel 1 times a night, tobramycin dexamethasone eye drops and Pranoprofen Eye Drops eyes 4 times a day. Neurological examination was negative, and there was no special treatment in neurology. After 3 days of treatment, the visual acuity of the right eye was 0.4 and that of the left eye was 0.5.One week later, the hormone was reduced to 50mg. When the patient was discharged on March 20, the binocular visual acuity was 0.8, the nystagmus disappeared, and the weakness of lower limbs disappeared. OCT showed that the serous retinal detachment in the macular area of both eyes disappeared, and the fundus photos showed mild sunset like fundus manifestations. The hormone was gradually reduced and the cumulative oral time was 6 months. (Jiang, Z.-J., & Ji, H.-Y., 2018)

**3. Nursing Evaluation**

Data were collected according to various physical assessments and observations, and Gordon's 11 functional health patterns were used to evaluate.

*3.1 Cognition and Processing Patterns of Health*

In the past, he was in good health, denied the family history of eye diseases, and occasionally smoked and drank alcohol. Denying the history of diabetes, denying the history of refractive errors, and having no history of drug allergy exposure.

*3.2 Nutritional Metabolism Pattern*

The patient's height was 173cm and weight was 60kg. He ate a little less in hospital.

*3.3 Elimination Pattern*

Patients defecate once a day, defecate soft, defecate unobstructed and urinate normally.

*3.4 Sports Activity Pattern*

Since the onset of the disease, the activity of the patient has decreased, most of them are in bed, and the muscle strength of both lower limbs is grade v.

*3.5 Sleep Rest Pattern*

Patients usually sleep well, sleeping for 7-8 hours every night. After admission, sleep was slightly worse, about 6 hours per night.

*3.6 Cognitive Processing Patterns*

The patient had clear consciousness, normal communication, normal hearing, smell and touch.

*3.7 Self Concept Pattern*

Patients have high expectations for disease prognosis and vision, and hope to obtain comprehensive knowledge of Koyanagi-Harada syndrome.

*3.8 Role Relationship Type*

The patient has a good relationship with his wife and children, a harmonious family and average economic income.

*3.9 Sexual Reproductive Function Pattern*

The patient said that the sexual life of husband and wife was harmonious, the relationship between husband and wife was close and interdependent.

*3.10 Stress Handling Type*

Be able to face the reality and seek help and support from others.

*3.11 Belief Type*

No religious belief.

**4. Nursing Problems**

*4.1 Pain*

It is related to headache caused by nervous system involvement.

*4.2 The Risk of Falling and Falling Into Bed*

It is related to low eyesight, dizziness, weakness of both lower limbs and atropine mydriasis.

*4.3 Possibility of Gastrointestinal Bleeding*

It is related to a large amount of oral prednisone acetate.

*4.4 Anxiety*

It is related to not knowing the condition, worrying about the recovery of the disease and taking glucocorticoids for a long time.

**5. Nursing Results**

Nursing measures:

*5.1 Relieve Headache*

The incidence of central nervous system symptoms of vkhs can be as high as 83.3%. Headache is very common in the early stage of the disease. (Yao, L., & Fan, J.-X., 2019)

5.1.1 The pain score of the patient was 4 points. The headache was moderate pain and showed continuous muggy pain. The scalp felt acupuncture and could not be touched. It affected sleep at night.

5.1.2 Strengthen patrol while doing basic nursing. Keep the ward clean and quiet, and the bed unit clean, tidy and comfortable. Encourage patients to stay in bed and rest.

5.1.3 Distract the patient and reduce head activity. Make the operation relatively centralized and reduce interference. When talking with the patient, slow down and speak softly. Explain the bedside care of family members and take good care of life.

5.1.4 According to the doctor's advice, 300 mg ibuprofen sustained-release capsule was taken intermittently. About half an hour after taking the medicine, the patient's pain was relieved and he could sleep at night.

Results: after taking corresponding analgesic measures, the headache was significantly relieved, and the pain score was 1 point. With the improvement of his condition, the patient's headache disappeared.

*5.2 Fall Prevention*

5.2.1 The patient's Johns Hopkins fall bed risk score was 14, which was a high-risk group. The patient's ability of daily living was assessed with 75 points, and was able to complete some daily activities independently, but needed some help.

5.2.2 When the patient is resting in bed, help the patient to change the posture movement to increase the comfort of the patient's rest, but the posture movement change needs to be slow and gentle. Pay attention to protection and use the bed guard. Patients cannot get out of bed alone. They need help when getting out of bed to prevent injury due to dizziness. When going out for inspection, family members and nursing workers shall be accompanied and wear anti-skid and comfortable shoes (Li, Y., 2021).

5.2.3 Inform patients and their families of the risk of falling into bed and preventive measures, hang eye-catching signs of "anti slip and anti fall" in areas prone to falling, remind patients to pay attention to safety at any time, hang signs of high risk of falling, stop and correct unsafe behaviors found in time, and the responsible Nurse shall carry out safety education repeatedly every day to prevent measures from becoming a mere formality. (Lian, Z.-J., & Ma, Y.-J., 2017)

5.2.4 Inform the toilet of anti-skid measures, encourage patients to use handrails and keep the ground clean and dry without water stains and obstacles. The ward and activity area are well lit. Strengthen safety awareness and prevent falling and collision. (Zhou, W., 2019)

5.2.5 To inform patients that atropine sulfate gel can dilate the pupil, appear photophobia and close vision, should pay attention to protect the eyes, avoid excessive light, indoor curtain can be used to block strong light, so as to reduce eye discomfort, and to cope with the blurring of vision after mydriasis. (Zhou, W., 2019)

5.2.6 Special personnel shall be assigned to accompany the patients. The patients shall be placed in the ward close to the nurse station as far as possible, and the patrol inspection of the patients at night shall be strengthened.

Results: the symptoms of vertigo and weakness of both lower limbs disappeared with the improvement of systemic symptoms. The patient did not fall into bed during hospitalization.

*5.3 Prevention of Gastrointestinal Bleeding*

5.3.1 Oral ranitidine protects gastric mucosa and reduces the side effects of glucocorticoids. (Gou, M.-B., 2021)

5.3.2 Patients are forbidden to eat strong tea, coffee, functional drinks, raw, cold, spicy, greasy and other irritating foods, and observe whether there is bleeding tendency, such as gum bleeding, etc. (Zhou, Y., & Lu, X.-Q., 2019)

5.3.3 Tobacco and alcohol can induce and aggravate diseases. Hot fried food may interfere with human immune function and induce the disease. Guide patients to quit smoking and alcohol, and avoid onions, peppers, peppers, ginger, garlic, etc. (Zhou, W., 2019)

5.3.4 When cooking, the taste is easy to be light, and more nutritious foods with high protein, high vitamins and rich in calcium and potassium, such as lean pork, beef, fish and shrimp, milk, bean products, fresh vegetables and fruits, are added to enhance physique and increase resistance (Zhou, W., 2019).

Results: they can do well in self-management, self-assessment and observation, consciously enhance the body's immunity, and regularly recheck blood tests.

*5.4 Relieve Patient Anxiety*

5.4.1 Through rich professional knowledge, skilled nursing skills and good communication skills, nurses establish a good nurse patient relationship, obtain the trust of patients and increase the sense of security of patients (Hong, J., 2011). Medical staff should avoid using inappropriate words and discussing the condition in front of patients, so as not to make patients receive negative hints and lead to psychological imbalance (Hong, J., 2011).

5.4.2 Patients are in a state of mild anxiety, worried about the recovery of the disease and visual impairment, have high expectations for medical staff, and can actively understand the progress of the disease and cooperate with the treatment methods. Soothe the patient's mood, clarify the treatment method and healing, and build the patient's confidence.

5.4.3 Inform patients that VKH syndrome is an intraocular inflammatory reaction with a long duration. Oral prednisone acetate maintenance dose and treatment time $\geq$ 6 months can effectively control the inflammatory reaction and prevent the recurrence of inflammation (Xiang, M.-H., 2018), effectively slow down the chronic process of the disease and effectively prevent the attack. Patients with hormone maintenance treatment less than 6 months are more likely to relapse or lose vision (Dai, X.-R., 2020). Guide patients to change their medication concept, guide patients to take drugs on time and in quantity in strict accordance with the doctor's advice, and do not reduce or miss without permission, so as to prevent rebound (Zhou, W., 2019).

5.4.4 Improve the drug compliance of patients adhering to formal treatment (Jia, F.-Z., 2016), guide patients to face up to diseases and adhere to reasonable treatment. Strictly follow the doctor's advice to take oral drugs to protect gastric mucosa, supplement potassium and calcium, and reduce the side effects of glucocorticoids (Gou, M.-B., 2021). Oral hormone therapy can lead to centripetal obesity, full moon face, acne, hairiness, etc., telling patients that they don't have to be tight or treated, and can recover slowly after stopping the drug (Zhou, W., 2019). In case of other complications, report to the doctor or see a doctor in time.

5.4.5 After fundus angiography injection of fluorescein sodium, because it is not absorbed by the human body, the patient's skin, conjunctiva and urine will turn yellow, which is determined by the characteristics of fluorescein dye and is harmless to the body. You can drink more water. Fluorescein sodium will be completely discharged from the body within 24 ~ 36h, so that the patient does not have to worry. (Hong, J., 2011)

5.4.6 Obtain family support, let family members participate in the whole treatment and nursing process, and do a good job in patients' diet and life care, so that patients feel respected, cared for and needed, so as to actively receive treatment (Zhou, W., 2019). Encourage patients to reduce ideological pressure, self-regulation and maintain a good attitude through communication with medical care or family.

Results: finally, the patients overcome their anxiety, face the reality, and actively cooperate with treatment and nursing. There were no complications during hospitalization, and preventive medication was still used according to the doctor's advice after discharge.

## 6. Discussion and Conclusion

VKH is rare clinically and is one of the most important types of uveitis causing blindness in China (Fu, A.-Q., 2013). Due to the involvement of multiple systems and organs, it has seriously affected the patient's psychology, life and work. It is worth noting that the disease is easy to delay and repeat, and the glucocorticoids that must be

used for a long time in treatment can also cause the disorder of immune function, It can increase the risk of disease recurrence and complications and aggravate the damage to patients (Zhou, W., 2019). Through the nursing of the patient's psychology, life, medication, diet and other aspects, the nursing staff establish trust and communication with the patient, so as to establish their confidence and actively cooperate with the treatment and nursing. Through effective nursing intervention, nurses have enhanced patients' cognition and management of their own diseases, promoted medical compliance, controlled patients' condition quickly and smoothly, recovered and discharged without complications. Urge and guide patients to enhance their body resistance, actively prevent infection, strictly follow the doctor's advice, use drugs correctly, conduct regular review, reduce disease recurrence (Zhou, W., 2019), and closely observe the side effects of drugs to avoid complications.

**References**

Bruno, M. G., Mc PS Jr. (1949). Harada's disease. *Am J Ophthalmol, 32*(4), 513-522. https://doi.org/10.1016/0002-9394(49)90876-4

Dai, X.-R. (2020). Vogt Koyanagi Harada syndrome: a case report. *Yunnan Medicine, 1*(41), 97-98.

Fu, A.-Q. (2013). Research progress of Vogt Koyanagi Harada syndrome. *Journal of Clinical Ophthalmology, 3*(21), 284-286.

Gou, M.-B. (2021). Vogt Koyanagi Harada syndrome with nystagmus: a case report. *Journal of Optometry*, (12).

Hong, J. (2011). Nursing cooperation of fundus fluorescein sodium angiography. *International Journal of Ophthalmology, 11*(6), 1115.

Hong, J. (2011). Psychological intervention in patients with acute angle closure glaucoma. *International Journal of Ophthalmology, 11*(6), 69.

Huang, G. (2017). Progress in the treatment of Vogt Koyanagi Harada syndrome. *International Journal of Ophthalmology, 6*(17), 1082-1086.

Jia, F.-Z. (2016). Effect of cognitive intervention on medication compliance and efficacy in young and middle-aged patients with hypertension. *Contemporary Nurses*, (2), 42.

Jiang, Z.-J., & Ji, H.-Y. (2018). High dose hormone for acute Vogt Koyanagi Harada syndromeShort term view of shock therapy. *Chinese Journal of Practical Ophthalmology, 1*(36), 64-67.

Li, Y. (2021). 23 cases of Vogt Koyanagi Harada syndrome. *Analysis of Systemic Drug Therapy*, (4), 129.

Lian, Z.-J., & Ma, Y.-J. (2017). Analysis and intervention of risk factors of falling and falling into bed in inpatients in digestive department. *Journal of Practical Clinical Nursing, 2*(26), 37-38.

Xiang, M.-H. (2018). Vogt Koyanagi Harada syndrome: a case report. *Chinese Journal of Ophthalmology, Otolaryngology, 1*(18), 42-43.

Yao, L., & Fan, J.-X. (2019). Clinical characteristics of 3 cases of Vogt Koyanagi Harada syndrome. *Journal of North Sichuan Medical College, 5*(34), 639-641.

Zhou, W. (2019). Nursing care of a case of bilateral Vogt Koyanagi Harada syndrome. *Contemporary Nurse, 5*(26), 159-160.

Zhou, Y., & Lu, X.-Q. (2019). Nursing care of Koyanagi-Harada syndrome. *Chinese Humanities Medicine*, (6).

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