PERIOPERATIVE NURSING OF A PATIENT WITH GIANT NASAL CRANIAL AND ORBITAL COMMUNICATING NEURILEMMOMA

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INTRODUCTION OF XIANGYA HOSPITAL
Founded by the Yale-China association of United States, one of the oldest western hospitals in China, Xiangya Hospital was originally named “Yali Hospital”

Set up Yali Nursing School, N.D. Gage, a nurse in Yali hospital, was the founder of Yali Nursing School, and also was the first chairman of Chinese Nursing Association

Renamed Xiangya hospital, it has been enjoying the reputation of “South Xiangya”, which means “the best hospital in south China”
**Development**

- Directly supervised by National Health and Family Planning Commission of China
- 3500 beds (220 ICU beds, 60 operating rooms)
- 90 Nursing units

**In 2017**
- 3 million visits to the outpatient and the emergency
- 130,248 patient·times discharged
- 71,287 surgeries

**Y2013-2017**
- 1,799 projects have been funded
- The total funding reached nearly CNY 499million
ENT Department in Xiangya Hospital is one of the units that receive the most patients suffered from skull base disease in the field of otorhinolaryngology in China. Its technical level has reached the top level of the country. Since 2015, more than 400 cases of complex skull base tumors have been performed surgeries here.
A neurilemmoma (schwannoma) is a benign, usually encapsulated neoplasm derived from Schwann cells, mostly it is solitary and slow growth.

The location of the tumor is deep, which is difficult to expose and resect totally.

It can be all over the body, the incidence of neurilemmoma in the head and neck is 25%~45%.
Personal Profile/Chief Complaint

Patient Luo
Female, 53 years old, peasant, married, illiterate

Chief Complaint
Diminution of vision in the right eye for 7 years, aggravated, diminution of vision in the left eye for 2 years.
### History of present illness

#### 7 years ago

**without obvious inducement**

| Diminution of vision in the right eye gradually | Accompany with mild diplopia | Without photophobia, dizziness, headache, nausea and vomiting, nasal obstruction and discharge, facial numbness, amblyacusia, disturbance of consciousness |

The head MRI: There was a skull base lesion.
History of present illness

2 years ago

Also without obvious inducement

| The above symptoms appeared again, aggravated | The left eye vision began to decrease and swallowing cough | Accompany with hoarseness, right eye pain, amblyacusia of right ear and distention of right occipital region | No nausea and vomiting, no consciousness loss, no convulsions and so on |
Vital signs

- Temperature: 36.8 °C
- Blood pressure: 127/86 mmHg
- Heart rate: 88 times/ min
- Respiration rate: 18 times/ min
Both eyeballs were prominent while the eyes moved freely.

The left eye had a visual acuity index of 20 cm, while right one had no light perception. The left eye retained direct response to light while loss consensual light reflexes while The right eye was the opposite.

Eyelids were slightly swollen.
Lab and Diagnostic examination

MRI

1. A large space-occupying lesion in the right petrous apex region, grows across the anterior, middle, and posterior fossa.
2. Obstructive hydrocephalus with interstitial cerebral edema, and right mastoid effusion.
Lab and Auxiliary examination
Past history/Diagnosis/Pathological examination

**History**
- There was **no special** in patient's past history, personal history and family history.

**Admission diagnosis**
- 1. Nasal, cranial, orbital communicating tumor
- 2. Obstructive hydrocephalus

**Pathological examination**
- The diameter of the tumor reached **11cm**, pathological examination confirmed it as **Neurilemoma**.
Nursing intervention

1. Preoperative care
2. Postoperative care
1 Preoperative care
1.1 For patient

- Patient preparation
  ① Psychological nursing
  ② Evaluation
  ③ Preoperative preparation
### Psychological Nursing

#### Preoperative care

1. **Same**
   - Took intervention to both patient and her family members at the same time

2. **Encourage**
   - Encouraged them to participate in medical discussion

3. **Explain**
   - Explained the details of surgical treatment and care plan to them patiently

4. **Listen**
   - Listened to the confusion and anxiety patiently

5. **Cooperate**
   - Established a cooperative relationship with them
## Evaluation

### Barthel Index for Activities of Daily Living (ADL) (Chinese)
- **Moderate dependence** (Before surgery)
- **Heavy dependence** (After surgery)
- **Moderate dependence** (Discharge)

### Fall Risk Factor Score Table (Chinese)
- **Moderate risk** (Before surgery)
- **Heavy risk** (After surgery)
- **Moderate risk** (Discharge)

### Braden Scale (Chinese)
- **Mild risk** (Before surgery)
- **Moderate risk** (After surgery)
- **Mild risk** (Discharge)

### Numerical Rating Scale (NRS)
- **Mild pain** (Before surgery)
- **Mild pain** (After surgery)
- **Mild pain** (Discharge)
Preoperative preparation

Prepared for gastric tube intake and tracheotomy

- Trained abdominal breathing and effective cough
- Gargle with Compound Chlorhexidine Gargle, 3 days before surgery
- Skin preparation, drug allergy test, cross match blood test
1.2 For health care staff

Health care integrated mode

Medical ward rounds with nurses

Doctors and nurses exchanged ideas every day

Regular study and discussion between doctors and nurses

Doctors gave lectures about the disease to nurses and discussed the patient’s current condition
2 Postoperative care

• Observation and evaluation

2.1

• Individual nursing

2.2
2.1 Observation and evaluation

1. Consciousness, pupil and vital signs
2. Balance of water and electrolyte
3. Posterior cranial nerve injury
Consciousness, pupil and vital signs

Monitored closely
- Monitored the patient's consciousness, pupil, vital signs and limb movements **Q1h** after surgery
- Paid attention to headache, vomit and so on

Developed target care
- Established **the standards** for calling doctors
- Adjusted **nursing plan**
② Balance of water and electrolyte

Monitored pituitary function

- Strictly recorded intake and out of water at 24 h especially urination, monitored blood electrolyte

Adjusted diet

- According to laboratory results
 postfix cranial nerve injury

Drinking water test

1. Sit up
2. 30 ml warm water
3. Observe
4. The time of swallowing
5. Choking cough

- Can a time to swallow the water smoothly--Optimal
- Divide more than 2 times to swallow, but without choking cough swallow--Fine
- One swallow, but there are a choke and cough--Medium
- In 2 times or more times to swallow, but there are choke and cough--Can
- Choking and cough frequently and can't swallow--Poor
2.2 Individual nursing

- Body position and skin care
- Airway management
- Diet care
- Activity nursing
① Body position and skin care

A. Used the air-cushion bed

B. Raised the bed head by 30 ° to 45 °

C. Turned over once in 4 hours
### 2 Airway management

| A | Keeped the air fresh, sterilized regularly |
|   | Keeped room temperature at about 22 ℃, relative humidity at 60%. |
| B | Continuous airway humidification and aerosol inhalation |
|   | Used vibratory sputum ejection apparatus to assist sputum drainage and encouraged patient to cough by herself |
| C | Oral lavage was used to replace the scrub oral care for 2-3 times / d |
| D | Raised bed head by 30 ° to 45 ° and controlled the speed of enteral nutrition |
|   | Supine and sputum aspiration were avoided when feeding within 30 min |
| E | Trained swallowing function |
|   | Make sure that the patient can eat without choking cough |
### 3 Diet care

**Enough nutrition**
- Enteral nutrition combined with parenteral nutrition
- Trained to eating as early as possible

**Avoid gastroparesis**
- Monitored blood glucose
- Used insulin to adjust blood glucose
### Activity Nursing

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<tr>
<th>Activity</th>
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<tr>
<td>Placed the &quot;prevent falling&quot; sign</td>
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<td>Adjusted the bed height</td>
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<tr>
<td>Convinenced the patient's daily use and bed bell</td>
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<td>Weared suitable clothes and non-slip shoes</td>
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<td>Compained all the time</td>
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<tr>
<td>Adequate lighting and used corridors and toilet handrails correctly</td>
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Summary

- Patient preparation
- Health care staff preparation
- Observation and evaluation
- Individual nursing
THANK YOU!
Welcome to China!
Welcome to Xiangya!