

Case Report: Assessment of a Patient Diagnosed with Osler Weber Rendu according to Abdellah's 21 Nursing Problems Model

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Abstract:

In this case report, a patient diagnosed with "Osler Weber Rendu" was examined based on Faye Abdellah's "21 Nursing Problem Theory". It aimed to prepare a nursing care plan for the patient using the nursing diagnoses in the North American Nurses Diagnosis Association (NANDA) classification system. The patient is a 51-year-old single female. The patient, who is a high school graduate and retired, lives in a metropolitan area and has never smoked or consumed alcohol in her entire life. The patient was diagnosed with iron deficiency anemia in 2016 and applied to a city hospital in 2017 due to the deepening of postmenopausal anemia, nosebleeds and as a result of the examinations, angiodysplasia was detected on the gastric corpus, duodenum, ileocecal valve and she was diagnosed with Osler-Weber-Rendu. 2019 the patient was diagnosed with Papillary Thyroid Cancer in the external center. Patient care is very important in the nursing profession. It was observed that planning the patient's care according to Abdellah's 21 Nursing Problem Model and analyzing the data according to the sub-dimensions of the model solved the patient's problems in a short time and the nursing care given to the patient was systematic.

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INTRODUCTION

Osler Weber Rendu disease, also known as Hereditary Hemorrhagic Thelangiectasia, is a rare autosomal dominant inherited disease that causes bleeding on the skin and mucosal surfaces (Haitjema et al.,1996). Osler Weber Rendu may cause serious complications in the brain, lung, or liver as a result of arteriovenous malformations (Begbie et al.,2003; Bayrak et al.,2006). It is observed equally frequently in both sexes (Demirseren et al.,2013; Korur et al.,2016). The incidence of the disease is 1-2/100.000. Treatment for Osler Weber Rendu's disease aims to stop bleeding and prevent complications. As well as the medical treatment requested by the physician, the professional care provided by the nurse is very important (Yücel et al.,2020). Nursing is a professional group based on philosophy, theory, practice, and research (Veliöğlu,2012). The World Health Organization (WHO) defines health as a state of complete physical, mental, and social well-being and not merely the absence of disease and infirmity (WHO,2019). While providing nursing care to the patient, it is important to benefit from the theorists who form the building blocks of the nursing profession (Soydan et al.,2020). Abdellah mentioned 21 nursing problems in her book "Patient-Centered Approaches to Nursing" written in 1960 (Basavanthappa, 2007; Allam et al.,2016; Alligood, 2017). These include; ensuring good hygiene and physical comfort, providing activities such as exercise, sleep and rest, ensuring safety by preventing accidents, injuries or trauma, preventing the spread of infection, ensuring good body mechanics to prevent or correct

deformities, ensuring oxygen supply to all cells of the body, ensuring the nutrition of all cells of the body, ensuring elimination, ensuring fluid-electrolyte balance, recognizing the physiological, pathological and compensatory responses of the body to the disease, ensuring the continuity of the body's regulatory mechanisms and functions, ensuring the continuity of sensory functions, positive or negative expression, identification and acceptance of emotions and reactions, identification and acceptance of the relationship between excitement and organic diseases, effective use and continuity of body language and verbal communication, development of effective interpersonal relationships, enabling the individual to achieve their spiritual goals, creating and maintaining a therapeutic environment, ensuring that the individual develops awareness in terms of physical, emotional and developmental needs, accepting possible optimum goals taking the physical and emotional conditions into account, utilizing social resources in solving problems caused by the disease, understanding that social problems may be the cause of the disease (Pektekin,2013). In this case report, a patient diagnosed with "Osler Weber Rendu" was examined based on Faye Abdellah's "21 Nursing Problem Theory". It aimed to prepare a nursing care plan for the patient using the nursing diagnoses in the North American Nurses Diagnosis Association (NANDA) classification system.

CASE REPORT

Verbal consent was received from the patient that the data would be used scientifically.

Sociodemographic Characteristics

The patient is a 51-year-old single female. The patient, who is a high school graduate and retired, lives in a metropolitan area and has never smoked or consumed alcohol in her entire life.

Medical History

1. Past Medical History

The patient was diagnosed with iron deficiency anemia in 2016 and applied to a city hospital in 2017 due to the deepening of postmenopausal anemia, nosebleeds and as a result of the examinations, angiodysplasia was detected on the gastric corpus, duodenum, ileocecal valve and she was diagnosed with Osler-Weber-Rendu. 2019 the patient was diagnosed with Papillary Thyroid Cancer in the external center. The patient had no history of surgery or accident. The patient had no known drug or food allergies.

2. Current Medical History

The patient who had already been diagnosed with Osler Weber Rendu, applied to a training and research hospital with the recent increasing complaints of fatigue. The patient's vital signs were the heart rate: 70/min, the blood pressure: 100/62 mm/Hg, and the body temperature: 36.1oC (tympenic part). The patient was admitted to the clinic because of her pale skin and facial telangiectasias observed during the physical examination.

The Assessment of the Case According to Abdellah's 21 Nursing Problem Model

1. Basic Requirements

1) Hygiene and Physical Comfort

The patient was able to maintain her individual needs such as cleaning and dressing on her own.

Nursing Diagnosis: 'Bleeding Risk' Due to the Disease

Aim: To eliminate the signs and symptoms of bleeding that may occur in the patient and if not eliminated, to minimize the risk

Interventions:

- (1) The patient and her relative were informed about the protection of the patient from traumas. Signs and symptoms of bleeding were not observed.
- (2) Vital signs were measured as 2*1. During the period the patient was hospitalized in the service, her vital signs were; the heart rate: 70-84/min, the blood pressure: 100/60-130/80 mm/hg, the body temperature: 36.1-37.2 oC (tympanic part).
- (3) The patient's laboratory findings were tracked in certain ranges (and the records are as follows; Hb:10.8 Hct:24 MCV:68 Plt:146 thousand Wbc:9660 Neut:6600 INR:1).
- (4) Oral mucous membrane was assessed using the oral assessment guide. The oral evaluation guide score was 4. (Oral assessment guide score is between 8-24. If the score is 8, oral care should be planned as 3*1, 9-19 6*1, and if it is > 20 points it should be planned as 12*1). No telangiectasia was observed in the oral mucous membrane.

2) Exercise and Rest

The patient stated that she slept for 12 hours/day before hospitalization and had naps during the day due to fatigue. The patient stated that, since her hospitalization, her sleep pattern has been the same and she has been sleeping for long hours.

Nursing Diagnosis: Sleep Disorder Due to Fatigue

Aim: To ensure that the case gets regular and enough sleep

Interventions:

- (1) The patient's sleeping hours were regulated. Daytime sleep was restricted and the patient was encouraged to sleep at night.
- (2) The time of medical interventions of the patient was planned so as not to interfere with the patient's sleep time.

3) Security

Nursing Diagnosis: Trauma Risk Due to the Disease

Aim: To protect the patient from the possible traumas

Interventions:

- (1) The patient was tracked constantly for signs and symptoms of bleeding. No bleeding was observed in the patient.
- (2) The vital signs were tracked at regular intervals. No deviation from normal was observed.
- (3) The patient's state of consciousness was monitored at regular intervals. The patient had an orientation to place, time, and person and her Glasgow Coma Scale score was 15 (The Glasgow Coma Scale is a scale that assesses the motor response, verbal response, and eye-opening and is scored between 3-15 points).

Nursing Diagnosis: Risk of Falling Due to Disease

Aim: To minimize the patient's risk of falling

Interventions:

- (1) The 'Itaki Fall Risk Scale' was applied to the patient at regular intervals to determine the fall risk. The patient's Itaki Fall Risk Scale score at the first hospitalization was 7 and the Itaki Fall Risk Scale score was between 7 and 10 during her hospitalization in the service (The Itaki Fall Risk Scale is a 51-point scale. Below 5 is considered a low

risk and 5 and above is considered as high risk). A 'Four Leaf Clover' symbol indicating that the patient was at risk of falling was attached to the head of her bed.

- (2) The functionality of the patient's bed railings was checked and kept closed during the patient's stay.
- (3) Not many items were left around the bed and a safe environment was provided for the patient. The patient did not fall during the follow-up period in the service.

Nursing Diagnosis: 'Risk of Infection' against the Possibility of Encountering Endogenous or Exogenous Microorganisms

Aim: To minimize the risk of infection in the patient

Interventions:

- (1) The patient and her relative were trained in aseptic techniques.
- (2) The patient was tracked for signs and symptoms of infection.
- (3) The life signs were measured as 2*1. During the time the patient was hospitalized in the service, vital signs were the heart rate: 70-84/min, the blood pressure: 100/60-130/80 mm/hg, the body temperature: 36.1-37.2 C (tympanic part).
- (4) Invasive methods were avoided unless necessary.
- (5) The drugs deemed appropriate by the physician were prescribed to the patient.

4) Body Mechanics

Nursing Diagnosis: Fatigue Due to the Disease

Aim: To minimize the patient's fatigue

Interventions:

- (1) Suitable energy planning for the hospital environment was prepared together with the patient.
- (2) The patient was encouraged to exercise at certain intervals suitable for hospital conditions. It was observed that the patient took walks in the hospital garden with her relative during the day.
- (3) The patient was informed about eating frequently in small amounts and consuming plenty of fluid.

2. Supporting Care Needs

1) Oxygenation

Nursing Diagnosis: Risk of Impaired Tissue Integrity due to the Disease

Aim: To ensure the continuity of the patient's tissue integrity

Interventions:

- (1) The tissue integrity of the patient was assessed. During the physical examination, she was observed to have pale skin and facial telangiectasias.
- (2) The patient was supported to get enough hydration and she was observed to take 2500-3000 ml of fluid daily.
- (3) Medical treatment requested by the physician was applied to the patient.

2) Nutrition

Nursing Diagnosis: Malnutrition due to nutrition more than her metabolic requirements: Nutrition More than Required

Aim: To ensure that the case gets the sufficient nutrition

Interventions:

- (1) The nutritional status of the patient was assessed. A diet suitable for the patient was determined in cooperation with the dietician. The patient was encouraged to eat in small portions. Mealtimes were determined according to the patient, who was restricted from eating at night.
 - (2) The patient's weight was tracked regularly every morning. The patient's weight was 95-97 kg during her hospitalization, and her height was 160 cm.
- 3) Elimination
The patient's defecation habit before hospitalization was 1/day and bowel sounds were 4/min.
- 4) Fluid-Electrolyte
As a result of the tracking of the patient's intake and discharge, it was observed that she was in balance and there was no deterioration in electrolyte levels in laboratory findings during the hospitalization period.
- 5) Reaction to the Disease
The patient verbally expresses that she does not have enough information about her disease and asks questions about her disease to the health personnel.
Nursing Diagnosis: Lack of Knowledge about her Disease
Aim: To ensure that the patient is informed about her disease
Interventions:
 - (1) Her disease interventions were defined to the patient in simple language. The patient was informed before each intervention.
 - (2) The patient was informed about the treatment.
 - (3) The patient was encouraged to ask questions. The patient was observed to ask questions to other team members about her disease and treatment during her stay in the service.
- 6) Regulating Mechanisms
Since the patient has no limitations in maintaining her physical functions, there is no need for regulatory mechanisms.
- 7) Emotional Functions
The assessment of the patient's vision, hearing, touch, and memory status revealed no existing problems. The patient's Glasgow Coma Scale score was 15.

3. Curative Care Requirements

- 1) Emotions and Reactions: Identifying and Accepting Positive and Negative Expressions, Feelings, and Reactions
It was observed that the patient communicated with the healthcare team members and frequently asked questions about the disease. The patient verbally expressed that, the disease process would end and that she would regain her life before the disease as soon as possible.
Nursing Diagnosis: 'Risk of Skin Integrity Disruption' due to the disease
Aim: To ensure the continuity of the patient's skin integrity

Interventions:

- (1) The patient's skin was assessed. The Braden Scale for Pressure Ulcer Assessment score was found to be 22. During the physical examination, the patient had pale skin and facial telangiectasias.
 - (2) The patient and the patient's family were educated about the importance of maintaining skin integrity and its effect on maintaining health and shortening the healing process.
 - (3) The patient was informed about keeping the skin and clothes clean and dry.
- 2) Communication: Maintaining and Facilitating Effective Verbal and Nonverbal Communication
No communication problems were observed during EE's hospitalization in the service.
- 3) Interpersonal Relationships: Ensuring the Development of Productive Interpersonal Relationships
EE's companion said that the patient was on good terms with herself and her siblings, that she was seeing them frequently, and that EE had positive relationships with herself and her environment.
- 4) Spirituality: Facilitating the Achievement of Personal Spiritual Goals
EE stated that the disease came from God and that the process she was going through would end one day. It was observed that the patient often prayed and read religious books.
- 5) Therapeutic Environment: Creating and/or Maintaining a Therapeutic Environment
EE stated that she slept for 8 hours/day before her hospitalization and had short 30-45 minute naps during the day. She stated that she has been suffering from sleep disorder since she was hospitalized and her sleep was 6 hours/day. It was observed that EE slept during the day but not at night.

Nursing Diagnosis: 'Sleep Disorder' due to Hospitalization

Aim: To ensure that the patient gets efficient sleep

Interventions:

- (1) The patient's sleep hours were regulated. Daytime sleep was restricted and the patient was encouraged to sleep at night.
 - (2) A calm, quiet, and dimly lit environment was provided for the patient to sleep.
 - (3) The patient's medical treatment was planned according to her sleep hours.
- 6) Self and Personality Awareness: Making the Individual Aware of Their Changing Physical, Emotional, and Developmental Needs
No problems were observed in the individual's personality consciousness during her stay in the service.

4. Essential Care Requirements

It was observed that the patient could maintain her essential needs by herself during her hospitalization in the service and did not often want visitors to stay with her.

CONCLUSION

Patient care is very important in the nursing profession. It was observed that planning the patient's care according to Abdellah's 21 Nursing Problem Model and analyzing the data according to the sub-dimensions of the model solved the patient's problems in a short time and the nursing care given to the patient was systematic.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

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