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Case Report : Nursing Care Management in Adolescent With Nefrotic Syndrome

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ABSTRACT

Background: Adolescent with nefrotic syndrome always face many problem of biopsychosociocultural and spiritual. During the nursing management, it is a challenge to nurse as a profession to give holistic care. **Methods:** This is a case report using nursing management from assesment to evaluation.

Results: This is a case of a 16 year old male who presented with new-onset nephrotic syndrome. He presented with progressive edema, and laboratory findings were significant for proteinuria and hypercholesterolemia. The nursing diagnoses are impaired skin integrity, excess fluid volume, knowledge deficit and anxiety and nurse give an interventionation for better result.

Conclusion: This is an early phase of case study of nephrotic syndrome in adolescent. However, our patient has history of drink beverage in long term. It could be that drink drink beverage in long term could be the trigger for new onset nephrotic syndrome. More studies are needed to understand the impact of nursing care for nephrotic syndrome in adolescent.

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Background. Nephrotic syndrome is a significant kidney disorder characterized by a combination of clinical features, including increased protein excretion in the urine (proteinuria), low levels of albumin in the blood (hypoalbuminemia), high levels of cholesterol and triglycerides, and edema (swelling) in various parts of the body. It is not a specific disease

but rather a set of symptoms that can arise from different underlying kidney conditions, such as minimal change disease, focal segmental glomerulosclerosis, and membranous nephropathy, among others (Belezza, 2018).

Adolescent with nephrotic syndrome always face many problem of biopsychosociocultural and spiritual. During the nursing management, it is a challenge to nurse as a profession to give holistic care. Andolino (2015) mentioned that on the basis of consensus and expert opinion, it is important to recognize and manage the complications that can arise in patients with nephrotic syndrome, such as dyslipidemia, infection, and thrombosis.

Nephrotic syndrome is a kidney disease that is often found in children. Characterized by proteinuria, hypoalbuminemia, edema, and hypercholesterolemia. Nephrotic syndrome affects more men than women. Part Most patients come to the hospital complaining of swelling and massive proteinuria. Treatment response showed most were sensitive to steroids (Nilawati, 2016).

Methods. This is a case report using nursing management from assesment to evaluation.

Result and Discussion. This is a case of a 16 year old male who presented with new-onset nephrotic syndrome. He presented with progressive edema, and laboratory findings were significant for proteinuria and hypercholesterolemia. The steroid responsiveness seen in majority of childhood nephrotic syndrome does not seem to be altered by SARS-Cov-2 infection (Morgan, 2021). The nursing diagnoses are impaired skin integrity, excess fluid volume, knowledge deficit and anxiety and nurse give an interventation for better result.

Assessment is the basic data collection stage including subjective data and objective data. The client's subjective data includes the client's age 16 years. Even though this disease can be reduced with prevention, this disease still attacks children and the

elderly whose organ function can decrease. Then the client said his feet were swollen approximately four days ago. The patient did not know what the original cause of the swelling was, but the patient said it might be due to frequently drinking bottled drinks. Physical examination data shows that the client's general condition is moderate, general consciousness is compos mentis, good skin turgor, moist lip mucosa, swollen lower extremities. BP: 1370/102 mmHg, RR: 22 times/minute, N: 100 times/minute, S: 37°C, body weight 53 kg before illness, weight when entering the emergency room 64 kg, height 165 cm. Pitting edema was found in the extremities. Laboratory examination results showed massive proteinuria (urine protein +4), hypoalbuminemia (serum albumin 1.6 g/dL), hypercholesterolemia (cholesterol 642.3 mg/dl), urine leukocytes (0-1).

The nursing diagnosis that emerged was The diagnostic data for hypovolemia is subjective data: the patient said swelling in both legs. On the objective data of the physical examination, both legs were seen to be swollen. So the problem of hypovolemia was determined, the diagnostic characteristic which includes hypovolemia is swelling in both legs.

The second diagnostic data for knowledge deficit is subjective data: the patient stated that previously he did not know the cause of the current disease. On objective physical examination data, the patient appeared confused when asked about his illness. So the nursing problem of knowledge deficit is determined, the characteristic of a diagnosis which includes a knowledge deficit is that the patient appears confused.

The third diagnostic data for anxiety is subjective data: the patient said he was anxious, sad because he had to be treated longer than expected. In the objective physical examination data,

the patient appeared anxious and sad because he had been in the hospital for a long time. So the anxiety nursing problem was determined, the characteristics of anxiety include anxiety and sadness.

The fourth diagnostic data for excess fluid volume is subjective data: the patient says there is a change in body weight, the patient says the weight has increased drastically. On the objective data of the physical examination, there was swelling in both legs. So the nursing problem of excess fluid volume is determined. The characteristics of excess fluid volume include weight gain, swelling in both legs.

Nursing intervention and implementation

At the nursing intervention stage, problems are prioritized by determining nursing diagnoses, so it can be seen which diagnosis must be made first or immediately. Nursing problems that arise based on the results of assessments through anamnesis, physical examination and laboratory examination, include hypovolemia, knowledge deficits, anxiety, excess fluid volume. Collaborative action is the administration of therapy which includes Amoxicillin 3x500 mg IV, Furocemid 3x10 mg IV, D10% 15 tpm infusion, oral prednisolone 4x2.

After being given medication as recommended by the doctor, the patient went back and forth to the bathroom, and the patient's weight decreased to 54 kg and the swelling decreased from day to day but it was still recommended that he be treated for 10 days according to the doctor's advice.

Evaluation

The patient's progress on the first day did not meet the expected outcome criteria so the intervention was continued. Meanwhile, the progress

on the second to fifth day did not meet the criteria for the expected results, so the intervention was maintained until the tenth day and on the tenth day the patient was allowed to go home and was given discharge planning.

On the ninth day the patient's swelling was gone, the patient was no longer sad. The patient was allowed to go home on the tenth day, the doctor said he had to pay more attention to the food and drink he consumed.

Conclusion and Suggestions.

This is an early phase of case study of nephrotic syndrome in adolescent. However, our patient has history of drink beverage in long term. It could be that drink drink beverage in long term could be the trigger for new onset nephrotic syndrome. Teach patient to test protein will help to detect relapse (Lawrence, 2017). More studies are needed to understand the impact of nursing care for nephrotic syndrome in adolescent.

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