POSSIBLE APPLICATIONS OF ICNP® IN THE CARE OF A PATIENT WITH CROHN'S DISEASE – A CASE STUDY

MOŻLIWOŚCI ZASTOSOWANIA KLASYFIKACJI ICNP® W OPIECE NAD PACJENTEM Z CHOROBĄ LEŚNIOWSKIEGO-CROHNA – STUDIUM PRZYPADKU

Hanna Grabowska, Weronika Kiłoczko

Faculty of Health Sciences with Subfaculty of Nursing and Institute of Maritime and Tropical Medicine
Medical University of Gdańsk, Poland

DOI: https://doi.org/10.20883/pielpol.2016.68

ABSTRACT

Introduction. Crohn's disease (CD) affects the whole gastrointestinal tract. The essence of the disease is an inflammation which may affect each segment of the gastrointestinal tract. The first symptoms appear mostly in young people between 15 and 25 years of age. Apart from the gastrointestinal tract symptoms, patients may develop symptoms relating to other systems and organs.
Aim. The aim of this study was to formulate a plan of nursing care of a patient with Crohn's disease with the use of the International Classification for Nursing Practice.
Material and methods. The research is based on an individual case study and the analysis of literature. The study was conducted in December 2015 at the Department of Gastroenterology and Hepatology, the University Clinical Centre of Medical University of Gdansk. Written consent of the patient was obtained for the study.
Results. In the process of providing nursing care to the patient, we used phrases that describe "ready" diagnoses and nursing interventions contained in the International Classification for Nursing Practice ICNP®. The plan of care includes the following nursing diagnoses: abdominal pain, impaired defecation, impaired skin integrity, nausea, lack of appetite, risk for being underweight, anxiety, lack of knowledge of disease, lack of knowledge of dietary regime, fatigue.
Conclusions. The proposed plan of nursing care for a patient with Crohn's disease based on the ICNP reference terminology fully reflects the key problems of the patient and the extent of interventions undertaken by nurses.

KEYWORDS: nursing diagnosis, classification, nursing care, Crohn's disease.

STRESZCZENIE

Wprowadzenie. Istotę choroby Leśniowskiego-Crohna (ChL-C) stanowi stan zapalny, który może obejmować każdy z odcinków przewodu pokarmowego. Pierwsze objawy pojawiają się głównie u osób młodych, między 15 a 25 rokiem życia. Poza symptomami ze strony przewodu pokarmowego u chorych pojawić się mogą również objawy wywodzące się z innych układów i narządów.
Cel. Celem niniejszej pracy było sformułowanie planu opieki pielęgniarskiej nad pacjentem z chorobą Leśniowskiego-Crohna, z wykorzystaniem Międzynarodowej Klasyfikacji Praktyki Pielęgniarskiej.
Materiał i metody. W pracy posłużono się metodą indywidualnego przypadku oraz analizą piśmiennictwa. Badanie zostało przeprowadzone w grudniu 2015 roku w Klinice Gastroenterologii i Hepatologii Uniwersyteckiego Centrum Klinicznego Gdańskiego Uniwersytetu Medycznego. Na jego przeprowadzenie uzyskano pisemną zgodę pacjenta.
Wyniki. W procesie pielęgnowania chorego wykorzystano frazy opisujące „gotowe" diagnozy i interwencje pielęgniarskie zawarte w Międzynarodowej Klasyfikacji Praktyki Pielęgniarskiej ICNP®. W planie opieki uwzględniono diagnozy pielęgniarskie: ból brzucha, zaburzona defekacja, zaburzona integralność skóry, nudności, brak apetytu, ryzyko niedowagi, niepokój, brak wiedzy o chorobie/ brak wiedzy o reżimie diety, zmęczenie.
Wnioski. Propozycja planu opieki pielęgniarskiej nad pacjentem z chorobą Leśniowskiego-Crohna, bazująca na terminologii referencyjnej ICNP, w pełni odzwierciedla kluczowe problemy chorego i zakres podejmowanych przez pielęgniarki interwencji.

SŁOWA KLUCZOWE: diagnoza pielęgniarska, klasyfikacja, opieka pielęgniarska, choroba Leśniowskiego-Crohna.

Introduction

Crohn's disease (CD) is among the group of non-specific inflammatory bowel diseases of unknown etiology. It typically affects young people, aged 15 to 25 years. The essence of CD are lesions in the intestinal mucosa, particularly the final section of the small intestine and the proximal section of the colon. Typically, the inflammation affects the entire tract. The relationship between genetic, environmental and immunological factors plays the main role in CD pathogenesis [1–7].

The nurses who provide care to CD patients are in charge of systematic assessment of the patient, prevention of complications, health education and supporting the patient and his or her family [8–12].

The aim of this study was to formulate a plan of nursing care for a Crohn's disease patient as per the International Classification for Nursing Practice (ICNP®).

Material and methods

The analysis of the literature in the paper is performed following the classic substance-related technique; the paper presents an individual case study, in which we utilized the interview technique, observation, analysis of medical records and measurements of vital signs. The study was conducted in December 2015 at the Department of Gastroenterology and Hepatology, the University Clinical Centre of Medical University of Gdansk. Written consent was obtained from the patient.

Case report

A man aged 21 was admitted to the Department following lack of response to outpatient treatment. The patient had received proctologist care for 4 years (he was diagnosed with grade 2 hemorrhoids) and had Baron's method rubber band ligation in 2013.

Over the past year there had been a decrease in patient's body weight in the range of 12–15 kg. Following each meal the patient experienced dyspeptic symptoms, so he changed his diet and eliminated the foods which cause excessive gas. For more than six months he had experienced pain in the lower abdomen, usually after defecation. The patient noted that the increase in the number of bowel movements increased, to approx. 5 times a day. It was very difficult to control his need for defecation because he felt strong, paroxysmal pressure. The patient very often felt pain after defecating. In recent months lack of appetite and fatigue intensified. Numerous lesions were visible around the anus and the scrotum, causing a burning sensation and skin sensitivity.

For several months, the patient had been supervised by the gastroenterological clinic. The patient was referred for a colonoscopy examination. In August, the suspicion of inflammatory bowel disease developed. The patient did not report intestinal diseases among the immediate family in his medical history interview. Prior to his hospitalization, the patient had received the following drugs for several months: sulfasalazine, encorton and folic acid. His health, however, did not improve. Since November 2015 the patient passed 1–2 stools with blood. The patient had a rectoscopy performed, which revealed numerous anal ulcers.

Vital signs within the normal range. Patient's body weight was 76.5 kg, height 185 cm (BMI: 22,21kg/ m 2). The patient was independent in terms of everyday activities. The patient lived with his parents, studied and worked.

Blood test revealed elevated levels of CRP, and magnetic resonance imaging of the pelvis revealed infiltrative and inflammatory lesions, thickened mucous membrane on the entire length of the intestines, the region around anus and scrotum. The patient was diagnosed with Crohn's disease. The patient was qualified for an ileostomy procedure and the recommended period of time was approx. 6 months, which was a source of anxiety for the patient.

The International Classification for Nursing Practice (ICNP®) was created to standardize the language of professional nurses and make communication more efficient. The current version of ICNP® is structured along seven axes and contains a list of about 900 diagnoses and over 1,000 interventions [13, 14].

Diagnosis 1. Abdominal Pain [10043953]
Interventions:
Administering Medication [10025444]
Ewaluacja odpowiedzi na zarządzanie bólem [10034053]
Evaluating Response To Pain Management [10009654]
Initiating Patient Controlled Analgesia [10010245]
Monitoring Pain [10038929]
Assessing Pain [10026119],
Positioning Patient [10014761]
Encouraging Rest [10041415]
Managing Pain [10011660]
Outcome: Abdominal Pain [10043953]

Diagnosis 2. Impaired Defecation [10022062]
Interventions:
Identifying Gastrointestinal Status Before Operation [10034167]
Monitoring Bowel Motility [10037211]
Assessing Bowel Status [10036475]
Assessing Bowel Continence [10030558]
Promoting Hygiene [10032477]
Managing Defecation [10041427]
Outcome: Impaired Defecation [10022062]

Diagnosis 3. Impaired Skin Integrity [10001290] (+ Anus [10002417] and Scrotum [10017603])
Interventions:
Administering Medication [10025444]
Treating Skin Condition [10033231]
Teaching About Self Care Of Skin [10033029]
Assessing Skin Integrity [10033922]
Assessing Self Care of Skin [10030747]
Skin Assessment [10041126]
Assessing For Sign Of Discomfort [10037295]
Skin Care [10032757]
Promoting Hygiene [10032477]
Maintaining Skin Integrity [10035293]
Outcome: Improved Skin Integrity [10028517]

Diagnosis 4. Nausea [10000859]
Interventions:
Administering Medication [10025444]
Teaching About Managing Nausea [10043687]
Assessing Nausea [10043694]
Positioning Patient [10014761]
Encouraging Rest [10041415]
Managing Nausea [10043673]
Outcome: No Nausea [10028984]

Diagnosis 5. Lack Of Appetite [10033399]; Risk for Being Underweight [10037586]
Interventions:
Evaluating Psychosocial Response To Instruction About Nutrition [10007111]
Monitoring Weight [10032121]
Monitoring Nutrition [10036032]
Teaching About Effective Weight [10033001]
Teaching About Eating Pattern [10032918]
Assessing Appetite [10038901]
Assessing Attitude Toward Nutritional Status [10002694]
Assessing Risk For Impaired Nutritional Status [10040921]
Weighing Patient [10033323]
Managing Nutritional Status [10036013]
Outcome: Lack Of Appetite [10033399]

Diagnosis 6. Anxiety [10000477]
Interventions:
Demonstrating Relaxation Technique [10024365]
Assessing Anxiety [10041745]
Assessing Psychological Response To Ostomy [10040398]
Promoting Positive Psychological Status [10032505]
Promoting Family Support [10036078]
Reporting status to interprofessional team [10042645]
Providing Privacy [10026399]
Providing Emotional Support [10027051]
Managing Anxiety [10031711]
Outcome: Reduced Anxiety [10027858]

Diagnosis 7. Lack Of Knowledge Of Disease [10021994]/ Lack Of Knowledge Of Dietary Regime [10021939]
Interventions:
Referring To Enterostomal Therapy Nurse [10040419]
Teaching About Disease [10024116]
Teaching About Nutrition [10024618]
Assessing Knowledge [10033882]
Assessing Knowledge Of Disease [10030639]
Assessing Family Knowledge Of Disease [10030591]
Counselling Patient [10031062]
Promoting Self Management Of Symptom [10038469]
Reinforcing Adherence [10024562]
Collaborating With Physician [10023565]
Providing Instructional Material [10024493]
Outcome: Adequate Knowledge [10027112]

Diagnosis 8. Fatigue [10000695]
Interventions:
Implementing Comfort Care [10039705]
Teaching Adaptation Techniques [10023717]
Assessing Fatigue [10026086]
Involving In Decision Making Process [10026323]
Managing Fatigue [10046289]
Outcome: Reduced Fatigue [10029390]

Discussion

The prevalence of CD is geographically diverse, with the highest rate of disease severity observed among people in highly developed Western Europe and North America. There are a number of factors that increase the risk of disease. They include: environmental factors associated with an increase in socio-economic status, such as changes in diet and hygiene (e.g. it is believed that lack of childhood exposure to microbes hinders the development of normal immune response) and a genetic predisposition [1–3].

Clinically, patients with gastrointestinal malfunction predominate. In 80% of patients the small intestine is affected, mucosal or watery diarrhea and abdominal pain are predominant symptoms. Patients may develop water and electrolyte imbalance, and shortages of essential nutrients. If the lesions are mainly located in the colon, the predominant symptom is diarrhea, and bloody stools are often observed. Abdominal pain involves the lower abdomen and the umbilical area. Very often there is concurrent sensation of urgency to defecate [1, 5, 7].

CD treatment usually involves pharmacotherapy (aminosalicylates, corticosteroids, immunosuppressive drugs, biological drugs), surgery (including right-sided hemicolectomy with an anastomosis of the small intestine from the colon, colectomy, stoma surgery) and new therapies (stem cell therapy, genetic therapy). The treatment is mainly causal in nature, and its goal is to induce remission, return to normal nutritional status and relapse prevention [1, 2, 4, 6].

The nurses who provide care to CD patients are in charge of systematic assessment of the patient, prevention of complications, health education and supporting the patient and his or her family [8-12]. What plays an important role is teaching the patient how to function in everyday life and how they should deal with persistent symptoms, which in turn contributes to ensuring patients' quality of life. It is important that the nurse's behaviour should be based on an individual and holistic approach to the patient in order to meet the patient's needs [8–12].

Nursing problems presented in this report correspond to those described in the cited literature, and

a plan of nursing care of patients with Crohn's disease based on the ICNP® reference terminology fully reflects the key problems of the patient, and the extent of interventions by nurses.

References

1. Małecka-Panas E, Słomka M. Przewlekłe nieswoiste choroby zapalne jelit. Wrocław: MedPharm Polska; 2012.
2. Rydzewska G, Małecka-Panas E. Choroba Leśniowskiego-Crohna – 100 lat diagnostyki i terapii. Poznań: Wydawnictwo Medyczne Termedia; 2008.
3. Radwam P, Klonowska I, Radwan K, Skrzydło-Radomańska B. Teoria higieniczna w nieswoistych zapaleniach jelit – prawda czy mit? Gastroenterologia Polska. 2012; 19(4): 176–178.
4. Tadaka Y. Podręcznik gastroenterologii. Lublin: Wydawnictwo Czelej; 2006.
5. Kosiara M, Łapińska J, Semianów-Wejchert J. Objawy pozajelitowe nieswoistych zapaleń jelit. Gastroenterologia Polska. 2009; 16(6): 475–480.
6. Cibor D, Szczepanek M, Owczarek D. Poszukiwanie nowych możliwości w leczeniu nieswoistych zapaleń jelit. Gastroenterologia Polska. 2008; 15(6): 417–420.
7. Szymańska E, Kierkuś J. Monitorowanie aktywności choroby Crohna: skala kliniczna, endoskopowa, histologiczna. Postępy Nauk Medycznych. 2015; 3: 181–185.
8. Talarska D, Strugała M. Pielęgnowanie chorych z chorobami zapalnymi jelit. W: Talarska D, Zozulińska-Ziółkiewicz D (red.). Pielęgniarstwo internistyczne. Podręcznik dla studiów medycznych. Warszawa: Wydawnictwo Lekarskie PZWL; 2009. 153–154.
9. Stanisławska J, Zubrzycka R, Talarska D. Jakość życia chorych z wrzodziejącym zapaleniem jelita grubego z uwzględnieniem czynników demograficznych i klinicznych. Problemy Pielęgniarstwa. 2015; 3(23): 373–379.
10. Glińska J, Grzegorczyk A, Dziki Ł. Proces adaptacji do życia z nieswoistymi chorobami zapalnymi jelit. Problemy Pielęgniarstwa. 2015; 1(23): 7–12.
11. Sierżantowicz R. Opieka pielęgniarska nad pacjentem z chorobą Leśniowskiego-Crohna. W: Jurkowska G, Łagoda K (red.). Pielęgniarstwo internistyczne. Podręcznik dla studiów medycznych. Warszawa: Wydawnictwo Lekarskie PZWL; 2011. 250–257.
12. Łagoda K, Sierżantowicz R. Edukacja zdrowotna w przewlekłych chorobach układu pokarmowego. W: Sierakowska M, Wrońska I. Edukacja zdrowotna w praktyce pielęgniarskiej. Warszawa: Wydawnictwo Lekarskie PZWL; 2015.
13. Gaworska-Krzemińska A, Kilańska D. Międzynarodowa Klasyfikacja Praktyki Pielegniarskiej (ICNP®) – istota, założenia, znaczenie, rozwój. W: Kilańska D (red.). Międzynarodowa Klasyfikacja Praktyki Pielęgniarskiej. ICNP® w praktyce pielęgniarskiej. Warszawa: Wydawnictwo Lekarskie PZWL; 2014. 19–41.
14. International Council of Nurses. Pillars & Programmes. Professional Practice. eHealth. International Classification for Nursing Practice (ICNP®). ICNP Browser NEW http://www.icn.ch/ICNP-Browser-NEW.html, (access 9.01.2016).

The manuscript accepted for editing: 07.07.2016
The manuscript accepted for publication: 17.08.2016

Funding Sources: This study was not supported.
Conflict of interest: The authors have no conflict of interest to declare.

Address for correspondence:
Hanna Grabowska
Dębinki 7
80-211 Gdańsk, Poland
phone: +48 58 34 91 980
e-mail: hanna.grabowska@gumed.edu.pl
Faculty of Health Sciences with Subfaculty of Nursing and Institute of Maritime and Tropical Medicine,
Medical University of Gdańsk, Poland