Nawlatyna Weronika, Myszka Paulina, Pawłowski Piotr, Jakubowska Klaudia, Kościołek Aneta. The tasks of a nurse in care for a patient after breast augmentation surgery by the implant placement method. Journal of Education, Health and Sport. 2019;9(9):182-189. eISSN 2391-8306. DOI http://dx.doi.org/10.5281/zenodo.3387128 http://ojs.ukw.edu.pl/index.php/johs/article/view/7384

The journal has had 5 points in Ministry of Science and Higher Education parametric evaluation. § 8. 2) and § 12. 1. 2) 22.02.2019.

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The authors declare that there is no conflict of interests regarding the publication of this paper.

Received: 25.08.2019. Revised: 30.08.2019. Accepted: 05.09.2019.

# THE TASKS OF A NURSE IN CARE FOR A PATIENT AFTER BREAST AUGMENTATION SURGERY BY THE IMPLANT PLACEMENT METHOD

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# **ABSTRACT**

Introduction. Breast augmentation is an increasingly frequent surgical intervention performed in women. This medical procedure is performed in the operating theatre or treatment room under general anesthesia. The doctor makes an incision, creates a pocket in the breast tissue and places an implant. The cut is closed with surgical sutures. A breast augmentation procedure, like any surgical procedure, is associated with the risk of complications. A nurse as a member of a therapeutic team is obliged to provide the highest quality care, prevent complications and perform therapeutic, rehabilitative, educational, preventive and health promotion functions.

**Aim.** The aim of the study is to determine the tasks of a nurse in caring for a patient after a breast augmentation procedure by the implant placement method.

Methods and materials. The study was based on the case study method, the research techniques included an interview, nursing observation, measurement and a documentation analysis. The research tools used for the study included the Individual Nursing Care Card, the Visual Analogue Scale - VAS, risk of postoperative nausea and vomiting – the Apfel score.

**Findings.** Nine nursing diagnoses based on the patient's health issues were made during the research process.

**Conclusions.** The nursing problems of the patient after the breast augmentation procedure by the implant placement method result from the procedure itself and hospitalization.

Key words: plastic surgery, breast augmentation, nurse, nursing care

#### Introduction

The adnexae are products of the epidermis, including hair, nails, sebaceous, sweat and scent glands, as well as the mammary gland, which develops intensively in women under the influence of estrogens during puberty. This is associated with an increase in its mass, mainly due to an increase in the fat tissue. The peak of mammary gland development occurs at the end of pregnancy and the lactation period. After its completion, the secretory part of the gland undergoes atrophy. The entire gland parenchyma is made of the connective tissue containing numerous cells and fibers, mainly collagenous [1].

The shape of a woman's breast mainly depends on the amount of the fat tissue and skin elasticity. The breast augmentation procedure is intended to correct the shape of the bosom and breast volume, it is also used in patients who have undergone a mastectomy or have congenital anomalies of the breast structure. The most commonly used are breast implants filled with saline or silicone gel. During the procedure, the operator may apply various types of incisions that include the following: inframammary fold incisions, peripapillary incision, incision under the armpit, incision in the navel, where in the next stage a tunnel under the skin is created, through which the implant is shifted. After making the incision, the so-called pocket is created in which the implant is placed. The breast augmentation procedure, like any other surgical intervention, carries the risk of complications such as: adverse reactions to anesthesia, inability to breast-feed (about 50% of patients), atrophy of the nipple tissue, sensation disorders of the mammilla and / or the treated skin, volume reduction and rupture of an implant as well as infection [2].

An implant rupture as a complication after the procedure, reaches 8.1% within 6 years of implant placement and increases to 16% after 8 years of observation. There are many

factors that can cause damage to the breast prosthesis including: strong pressure, compression during mammography, too much pressure on the capsule. However, the most common cause is

a damage happening during the prosthesis implantation [3].

The risk factors for the above-mentioned complications are the following: *smoking*, *obesity*, *radiation therapy*, *chemotherapy*, *diabetes*, *age*, *a large bosom* [4].

As in the case of any surgical intervention, patients also receive perioperative antibiotics prior to breast augmentation procedure. All surgical pockets made during the incision are irrigated with antibiotic solutions, and the implants are bathed in the same antibiotic solution before insertion. Implants are treated very little to minimize possible contamination [5].

#### Aim

The aim of the study is to determine the tasks of a nurse in patient care after breast augmentation surgery by the implant placement method.

# Methods and materials

The individual case study method was used for the study, and the research techniques included an interview, nursing observation, measurement and documentation analysis. The research tools used for the study included the Individual Nursing Care Card, the Visual Analogue Scale - VAS, risk of postoperative nausea and vomiting – the Apfel score. The study was conducted in a home environment from the 26<sup>th</sup> to 29<sup>th</sup> of June 2019. The subject of the study was a patient after the breast augmentation procedure conducted by the implant placement method. Permission to conduct the study was obtained from the patient, and she was also notified of anonymity and voluntary participation.

# **Description of the patient**

Patient – 36 years old, secondary education, works as a beautician, married. She lives abroad with the whole family. She came to Poland to have a breast augmentation procedure performed. The person taking care of the patient is her sister. The interview shows that the family does not show any problems. The patient was admitted to the Hospital - Żagiel Med as scheduled, after prior consultation with a plastic surgery doctor regarding the type of implant and method of a procedure. The woman decided to have the procedure performed about 2

years after the first consultation. The interview with the patient showed that the size of her breasts had never been satisfactory for her, moreover, the patient did not report the occurrence of chronic diseases.

On the day of admittance to hospital, laboratory tests such as: TSH level, blood count, blood coagulation parameters and electrolyte level were performed, together with ECG and breast ultrasound examinations.

At night before the procedure, the patient reported difficulty in falling asleep and sleeping, the patient also felt anxious. Medication was given following the orders of the doctor on duty.

On the day of the procedure, the patient remained fasting, and she also signed a consent to having the procedure performed. Right before the procedure, the patient had a conversation with the surgeon and anesthesiologist. Before the procedure, the surgeon made a sketch of the cuts, a sedative was given to the patient. The procedure was performed under general anesthesia, it lasted 3 hours.

On the first day after the procedure, the patient suffered from the operated site pain. The patient estimated the pain at 8 to 10 on the VAS scale. The analgesics administered following the doctor's order included TJ. Tramadol, Metamizole, No - Spa. The patient also reported nausea and a vomiting incident (assessed according to the scale). Vital signs remained within physiological norms.

On the second day after the procedure, the patient assessed her well-being as much better, the dressing was changed, the wound and edema were controlled. The patient was informed of the need to have the dressings changed, observe hygiene rules and care for the operated site. A check-up and suture removal after 7/12 days were recommended. The patient received a compression bra, which she was expected to wear every day until the check-up appointment.

She was informed that within the period of 2 weeks she was supposed to stay at home and avoid physical exertion.

### **Findings**

The empirical data obtained led to the formulation of the following nursing diagnoses:

- 1. Sleep problems caused by anxiety before the procedure.
- 2. Pain in the area of the postoperative wound, caused by disruption of tissue continuity, the presence of drainage tube and skin sutures.

- 3. The incidence of nausea and vomiting due to the use of general anesthesia.
- 4. The risk of infection of the operated site due to disruption of tissue continuity.
- 5. The risk of developing sensation disorder in the area of the nipple and breast.
- 6. The risk of dissatisfaction with the cosmetic effects of the procedure.
- 7. The risk of the implant rupture.

Diagnosis no.1: Sleep problems caused by anxiety before the procedure.

**Aim:** Facilitating the patient's rest within the preoperative period.

# Care plan:

- Talking to the patient and dispelling fears related to the procedure.
- Proper preparation of the patient's room for sleep, ventilating it 15 min. before the sleep.
- Ensuring silence and dimming the possible lights.
- The use of pharmacotherapy following the doctor's order.

**Result:** The patient fell asleep, rest ensured.

**Diagnosis no. 2:** Pain in the area of the postoperative wound, caused by disruption of tissue continuity, the presence of drainage tube and skin sutures.

**Aim:** Mitigating pain in the postoperative period.

# Care plan:

- Calming the patient down and explaining the cause of pain.
- Providing the patient with adequate conditions for rest in the patient's room.
- Controlling postoperative wound and sutures.
- Administrating analgesics following the doctor's order.

**Result:** The pain remitted.

**Diagnosis no. 3:** The incidence of nausea and vomiting due to the use of general anesthesia.

**Aim:** Minimizing the occurrence of nausea and vomiting in the postoperative period.

### Care plan:

- Using a semi-Fowler position to minimize the occurrence of symptoms.
- Ensuring silence for the patient.
- Providing the patient with a kidney dish and lignin.

• Administrating anti-emetic drugs following the doctor's order.

**Result:** Nausea and vomiting remitted.

**Diagnosis no. 4:** The risk of infection of the operated site due to disruption of tissue continuity.

Aim: Minimizing the risk of the postoperative wound infection until it heals.

# Care plan:

- Observing the operated site for signs of inflammation.
- Controlling the wound and dressing change systematically.
- Controlling the wound secretion.
- Bathing the postoperative wound and caring for the skin around.

**Result:** No infection of the operated site.

**Diagnosis no. 5:** The risk of developing sensation disorder in the area of the nipple and breast.

Aim: Preventing sensation disorder.

### Care plan:

- Control of the patient's sensation.
- Observation for neurological symptoms.
- Talking to the patient about self observation.

Evaluation: Sensation disorders did not occur.

**Diagnosis no. 6:** The risk of dissatisfaction with the cosmetic effects of the procedure.

**Aim:** Obtaining the highest level of the patient's satisfaction.

# Care plan:

- Enabling the patient to have a thorough and detailed conversation with the surgeon.
- Selecting an appropriate procedure technique.
- Selecting together with the patient the right implant size.
- Talking to a patient about complications and possible scarring of the wound.
- Informing the patient that implants may be subject to wear.

**Evaluation:** The patient's satisfaction was obtained at the highest level.

**Diagnosis no. 8:** The risk of implant rupture.

**Aim:** Minimizing the incidence of the implant rupture.

Care plan:

• Choosing the right shape and size of the implant.

• Observation of the patient.

• Discussing with the patient the issue of reporting all worrying symptoms.

• Discussing preventive measures by not applying too much pressure to the implants.

**Evaluation:** The implant rupture did not occur.

**Conclusions** 

1. After the breast augmentation procedure by the implant placement method the patient complains of postoperative pain caused by disruption of tissue continuity, feels

nauseous and she has had an incident of vomiting.

2. The prevailing issue affecting the patient is the feeling of fear and anxiety associated

with the nature of the illnesses, hospitalization, recovery period and insufficient

knowledge.

3. The patient does not have sufficient knowledge and skills to apply lifestyle

recommendations after the breast augmentation procedure by the implant placement

method.

4. After the procedure, the patient is affected by many emotions, most often it is a feeling

of fear and anxiety resulting from hospitalization and surgery. At present the patient's

emotional condition is very good and she is completely satisfied with the final effect.

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