

Case Report

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Chemotherapy Induced Nausea and Vomiting in Patient Suffering from Sigmoid Colon Cancer (Case Report)

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ABSTRACT

The patients suffering from cancers receive different types of treatments like chemotherapy, radiotherapy and surgery. Those patients who receive chemotherapy exhibit different side effects due to it. The most common side effects are nausea and vomiting. In this paper it is explored that, what is sigmoid colon cancer, what are its causes and symptoms. In addition, the nursing physical assessment and nursing care plan is explored in a logical way. Moreover, in the last of the paper some recommendations are given to improve the nursing care skills of nurses.

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Introduction

Mr.A.B, a 19 years old male was diagnosed with stage III carcinoma of sigmoid colon and had surgery in September 2014. According to patient initially, he developed severe vomiting which was out of control. After that, he developed severe pain in abdomen. When biopsy was done it was confirmed that he had cancer of sigmoid colon. Finally, the tumor was removed by surgery in September 2014 and patient was placed on chemotherapy. One of the upsetting complains for patients receiving chemotherapy is nausea and vomiting. So, state that, "Chemotherapy-induced nausea and vomiting (CINV) is one of the common and distressing side-effects experienced by patients during cancer treatment" [1].

Pathophysiology

Sigmoid colon cancer is a type of colorectal cancer which develops in the sigmoid section of colon. Colon (large intestine) has four sections that are ascending colon, transverse colon, descending colon and sigmoid colon. Initially there is no symptom in colon cancer, as described by American Cancer Society, "Early colorectal cancers may not cause any symptoms" [2]. They have further stated that colorectal cancer may cause one of these symptoms, change in bowel habits, rectal bleeding, abdominal pain, weight loss and Weakness. Mr.A.B had also complains of weakness, weight loss and severe abdominal pain. Furthermore, the exact cause of colon cancer is not known but there are some factors which can increase the susceptibility of getting it. The American Cancer Society has declared some risk factors like diet high in red meat, physical inactivity, obesity, smoking, heavy alcohol use, younger age and family history [2]. Although all the risk factors were not present in A.B however, those that were present were young age as he was 19 years old and consumption of high red meat. He stated that he was employee in company where the

employer provided diet high in red meat.

History

Mr.A.B has no previous medical history of any chronic disease. Although he has a history of severe vomiting for three months prior to his diagnosis. He had been treated for the complain of vomiting in local hospital of his village. Finally, he was diagnosed with stage III sigmoid colon cancer and had surgery in September 2014. Following surgery, he was referred to KIRAN hospital Karachi in January 2015 for chemotherapy. The patient had received eight cycles of chemotherapy and had excellent response to it. Moreover he has received all childhood vaccination and has no positive family history of cancer.

Nursing Physical Assessment

A.B. was attentive and was oriented to time place and person. His temperature was 98.6 F, pulse rate was 82/minute, respiratory rate was 20/minute, oxygen saturation on room temperature was 100%, lungs were clear and his pain level was 6. Patient's skin was cold and dry as, Fabbrocini [1], stated that chemotherapeutic agents have significant side effects on skin like skin rash, skin dryness and hyperpigmentation [3]. Moreover, patient's bowel sound were hypoactive as patient stated that he had complain of constipation for several days. Furthermore, patient's general appearance was frail with some general weakness. Mr.A.B was up and about and was able to perform his daily activities independently.

Related Treatments

A.B. medications were injection Oxaliplatin 120mg, injection 5FU (Fluorouracil) 900mg, tablet Leucovorin 300mg and infusion Ringer Lactate 1000ml. Patient was receiving Injections Oxaliplatin and 5FU as an Adjuvant chemotherapy for cancer treatment. Patient had surgery in September 2014, so was receiving adjuvant chemotherapy. Adjuvant chemotherapy is given after surgery to reduce the risk of tumor to grow again. Kandioler et al.

(2015) stated that, “Adjuvant chemotherapy is recommended for all patients with lymph node positive colon cancer”. Kandioler, have further stated that these drugs like oxaliplatin, irinotecan, capecitabine, cetuximab, bevacizumab and fluorouracil are used as adjuvant therapy for colon cancer [4]. In addition, patient was also receiving tablets Leucovorin 300mg for the prevention of adverse effects of chemotherapy drugs. Furthermore, Ringer Lactate 1000ml was used as solvent for chemo drugs and to provide fluid to patient. Moreover, patient was on regular diet and was advised by doctor to use fruits and vegetables frequently. The patient had no history of allergy to any medication and food, I/V cannula was placed in his right hand.

Nursing Care Plan

A.B. Nursing Diagnose is, Nausea related to effects of medication (chemotherapy) secondary to cancer [5]. According to Gordon, LeGrand and Walsh “Nausea is a common complaint in advanced cancer and the effect on quality of life can be severe”. Furthermore, “Anticipatory nausea and vomiting (ANV) is a common complaint among cancer patients and is often predicated on the development of chemotherapy-induced nausea or vomiting” [6]. Mr.A.B also stated that he has severe complain of nausea after the administration of chemotherapy drugs. The short term goal is, the patient will report decreased frequency of nausea [5].

Nursing interventions for the patient include, encourage the client to eat small frequent meals and to eat slowly; eliminate unpleasant sights and odors from eating area; encourage patient to set in a semi-fowler’s position after eating and to change position slowly and teach how to use the antiemetic medication prior to chemotherapy [5]. Furthermore, Distraction, relaxation and visualization methods like music therapy could be used [1]. The patient followed the interventions and reported minimal complain of nausea after chemotherapy on the succeeding day.

Recommendations

The patient should follow the above interventions to reduce the incidence of nausea and vomiting. In addition, patient should take deep breaths as, “breathing and meditation help some people to relax before treatment” [7]. Furthermore, patient should avoid eating and drinking for at least one hour after receiving chemotherapy. On the other hand, nurses should administer the prescribed antiemetic medication prior to chemotherapy. Similarly, they should provide proper health education to patients about the prevention of nausea and vomiting due to chemotherapy.

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