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CASE REPORT

Gastric Carcinoma: Case Report on Nursing Care

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Abstract

This is the case report of a man who is diagnosed with gastric carcinoma. Early diagnosis and prompt treatment helped the multidisciplinary team to great positive response from the patient. Nurses are the important person in health care of the patients in all aspects such as curative, preventive, rehabilitative to alleviate problems of patients. This nursing case reports will give understanding the approach of nursing care.

Keywords: Gastric Carcinoma; Case Report; Nursing Care.

Introduction

Gastric carcinoma, is the accumulation of an abnormal group of cells that form a mass in a part of the stomach.

It consists of two pathological variants, intestinal and diffuse. The intestinal-type is the result of an inflammatory process that progresses from chronic gastritis to atrophic gastritis and lastly to intestinal metaplasia and dysplasia. The diffuse-type, is related with an unfavorable prognosis because the diagnosis is often delayed until the disease is advanced.

Around 90-95 percent of all gastric carcinomas are adenocarcinoma. According to the WHO, 723,000 carcinoma-related deaths are caused by gastric carcinoma each year, globally. It is the fifth most common carcinoma worldwide.

In India, the incidence rate of gastric carcinoma is very low compared to that in western countries, and thenumber of new gastric carcinoma cases is approximately 34,000, with male to female ratio of 2:1.

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Case Report

Mr. A Kumar, 72 years married male weighing 64.6 kg, 163 cm height, BMI 24.3 kg/m^2 with healthy body built, belongs to a middle class family, shopkeeperby occupation admitted in male surgery ward with the diagnosis of carcinoma of gastric. Chief complains of patient were weakness and loss of appetite from 50 days, pain in lower limb from one month, history of passage of black colour stool (for two days, 50 days back), loss of weight five kg in last one month.

Patient was apparently well two months back, after that he develops pain and weakness in lower limb, loss of weight. It was not related with pain abdomen, nausea and vomiting and abdominal distension. Then he took treatment from local doctor and then referred to tertiary level hospital, where endoscopy is done and specimen is taken. He is diagnosed with gastriccarcinoma.

After that for another opinion he came to this hospital with the same chief complains and specimen

taken with endoscopy is also investigated here, and then it was confirmed that patient is having gastric carcinoma. Patient also undergone Echo cardiography and diagnosed as left ventricular hypertrophywith normal left ventricle function. Patient has a history of hypertension from last seven years. He is taking antihypertensive from his family doctor (telmisartan, and amlodipine 40). There was no history of TB and DM.

Patient had undergone TURP for enlarged prostate (BPH) 14 years back. Patient is smoker from last 50 years one bundle of bidi per day and occasionally taking alcohol.There is no family history of any disease.

On examination patient was conscious and oriented to self, time, place and person. He was dull and cooperative, well dressed and groomed. Patient was afebrile, pulse and respiration was normal with increased BP. On abdominal examination, abdomen was distended, no visibleveins; abdomen was soft and tenderness present over epigastric and umbilical region. Bowel sound was present. In cardiovascular system assessment, no chest deformity, S1 and S2 heard normal. On respiratory assessment, bilateral wheeze sound heard in upper lobe and pulmonary function test report shown suspected severe restrictive abnormality.

Patient had undergone diagnostic laprotomy and radical D2 gastrectomy with feeding jejunostomy with tube duodenostomy.

Risk Factor

According to the Literature	According to the Patient
• Age and sex : Rarebelow the age of 30; thereafter it increasesrapidly, both in males and females. The intestinal type rises faster with age than the diffuse type; it is more frequent in males than in females. Diffuse carcinoma tends to affect younger individuals, mainly females.	• Male 72 years old
• Hereditary (Familial) factor	• Not Significant
• Cigarette smoking	• Patient is smoker from last 50 years one bundle of bidi per day and taking alcohol.
• Alcohol consumption.	
• Diet: High salt intake,smoked or cured meats or fish, pickled vegetables and chili peppers.	• Not Significant
• Occupational exposures: Nitrosamines and inorganic dusts.	• Not Significant
• Overweight	• Not Significant
• Low Socioeconomic status	• Not Significant

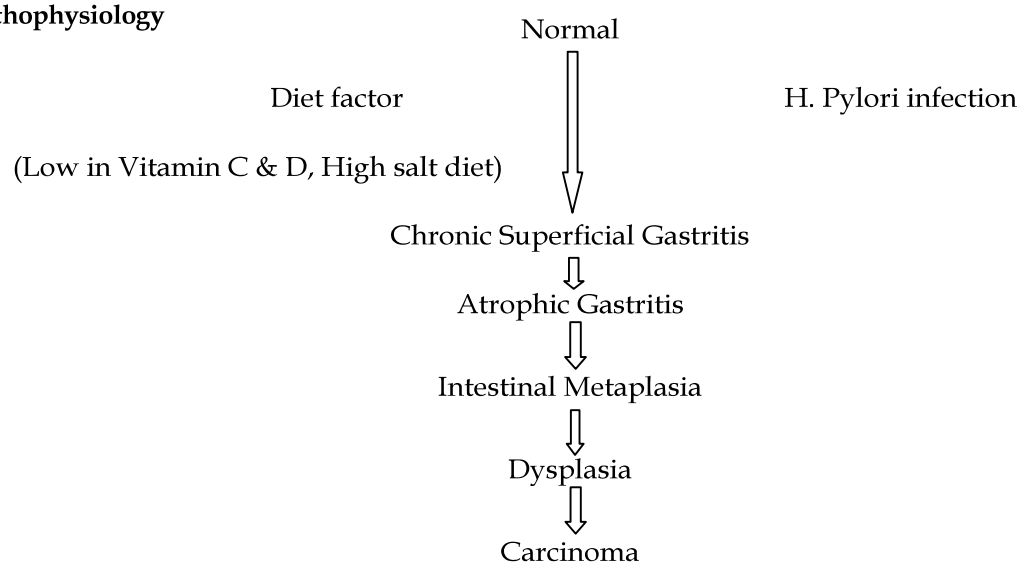
Etiology

According to the Literature	According to the Patient
• Infection of the gastric with the bacterial organism H. Pylori • Gastric Polyps • Bile reflux • Epstein-Barr virus: EBV account for 7% to 18% of all cases.	Not Significant

Clinical Manifestations

According to the literature	According to the patient
Early disease has no associated symptoms.Most symptoms of gastric carcinoma reflect advanced disease. Patients may complain of one or more of the following: • Indigestion • Nausea or vomiting • Dysphagia • Postprandial fullness • Loss of appetite • Melena • Hematemesis • Unexplained weight loss • Sudden onset of dyspepsia after the age of 40 years • Anemia • Midepigastric palpable mass • Abdominal mass	• Weakness • Loss of appetite • Pain in lower limb • Passage of black colour stool • Loss of weight

Pathophysiology



Lab Investigations

Investigations	Patient's Finding	Normal Finding	Remark
Hb	11.2 gm/dl	Adult male: 13-17 gm/dl, Adult Female: 12-15 gm/dl	Decreased
RBC	4.17 million/cumm	Adult male: 4.5–5.5 million/cumm Adult female:3.8-5.2 million/cumm	Normal
TLC	9600 /cumm	4000-11000/ cumm	Normal
DLC	N= 89.4%	N- 40-70 %	Neutrophilia
	L=5.1%	L-20-40 %	Decreased
	E=0.1%	E-1-6 %	Decreased
	B=0.1%	B- < 2%	Normal
	M=5.3%	M- 2-8%	Normal
MCV	84.1 fl	78-98 fl	Normal
MCH	27.0 pg	27-32 pg	Normal
MCHC	32.1gm/dl	31-36 gm/dL	Normal
RDW	20.8	11-14	Increased
BUN	44mg/dl	8-25 mg/dL	Normal
Serum creatinine	1.64mg/dl	0.6-1.2 mg/dL	Normal
Serum Na	135.0 mmol/L	135-145 mmol/L	Normal
Serum K	3.2mmol/L	3.5- 5.1 mmol/L	Decreased
Serum Chloride	102.0mmol/L	97- 106 mmol/L	Normal
Serum Total Ca	7.58mg/dl	8.5- 10.5 mg/dL	Decreased
Serum uric acid	5.5mg/dl	4.0 to 8.5 mg/dL	Normal
HBsAg	Negative		Normal
Anti HCV antibodies	Non reactive		Normal
Anti HIV antibodies	Non reactive		Normal

Diagnostic Evaluation

According to Literature	According to Patient
• Medical history including family • Physical Examination • Complete blood count • Comprehensive chemistry profile • Upper GI endoscopy • Endoscopic ultrasound • Endoscopic resection • Ultrasound scan • Barium meal X-ray • Laparoscopy with biopsy • CT scan or PET scan • HER2 testing	CECT Abdomen Report showed enhancing wall thickening involving body of gastric without obvious perigastric extension or significant, consistent with gastric carcinoma. Histopathology report of gastrectomy specimen showed poorly differentiated adenocarcinoma gastric- mixed type – $pT_{4a}\,N_1\,M_0$

Management

According to Literature	According to Patient
Surgical Therapy There are two principle types of gastric resection—the subtotal gastrectomy and the total gastrectomy. In addition to removal of the gastric, resections with curative intent generally include lymphadenectomy (removal of nodes adjacent to the gastric (D1 dissection) and radical lymphadenectomy (D2). Following gastrectomy, intestinal continuity is restored by using Billroth II gastrojejunostomy or Roux-en-Y esophagojejunostomy. **Endoscopic Therapy** Therapeutic endoscopy may be curative for early gastric carcinoma or palliative for more advanced disease. Patients with more superficial lesions may be candidates for endoscopic resection, while patients with more advanced disease may require palliative therapy. Stent placement and the placement of feeding or decompression tubes may all be accomplished endoscopically. **Endoscopic Mucosal Resection** It includes strip biopsy,double-snare polypectomy, resection with combined use of highly concentrated saline and epinephrine, and resection using a cap. **Chemotherapy** Adenocarcinoma of the gastric is relatively sensitive to chemotherapy. Fluorouracil (5-FU) is the most commonly used drug in the treatment of gastric carcinoma. Chemotherapeutic drugs can be used in combinations, the most common is 5-FU, doxorubicin, and mitomycin C (FAM). **Radiation Therapy** Radiation therapy uses high energy rays to treat carcinoma. EBRT (External Beam Radiation therapy) is the method used to treat gastriccarcinoma. This method delivers radiation from outside of body using a large machine.	Patient under gone D2 total gastrectomy and intestinal continuity is restored by gastrojejunostomy.

Medication received by patient during post operative period

Medication	Dose	Frequency
Inf. Metrogyl	500 mg	TDS
Inj. Amikacin	500 mg	OD
Inj. Pantop	40 mg	BD
Inj. Piptaz in 100ml NS	4.5 mg	TDS
Inj. Levoflox	500 mg	OD
Tab. Telma	40 mg	OD
Inj. PCM in 100ml NS	500 mg	TDS

Nursing Management

Nursing care of patient with gastric carcinoma is similar to that for other patients with carcinoma and addresses the physiologic and psychological needs of the patient. Physiologic problems are primarily due to gastrointestinal manifestation of the disease. Nursing care strategies will reduce the pain, discomfort and to prevent complication.

Nursing Care Plan

1. *Ineffective breathing pattern related to effect of anesthesia or restricted chest movement / pain as evidenced by changes in rate and depth of respiration, abnormal breath sound.*

Interventions

1. Assess the breathing pattern of the patient.
2. Auscultate the chest for breath sounds and presence of secretions.
3. Provide comfortable position to the patient.
4. Assist the patient and instruct in effective deep breathing and coughing with upright position.
5. Assist with incentive spirometry, steam inhalation and provide chest physiotherapy.
6. Assess for pain, discomfort and administer medicine before breathing exercises.
7. Provide comfort devices to improve breathing.

8. Administer humidifying oxygen.
9. Administer IV fluids.

2. *Pain related to cancer invasion of gastric/ surgical procedure as evidenced by verbal reports of discomfort, distraction behavior/ insomnia.*

Intervention

1. Assess characteristics of pain and discomfort, location, quality, frequency, duration, etc. verbal and non verbal pain cues.
2. Provide comfortable measures (frequent changing of position, back rub, comfort devices, guided imagery, diversional activities).
3. Schedule rest periods, and provide peaceful environment
4. Administer analgesic routinely as prescribed by the physician

3. *Imbalanced nutrition: less than body requirement related to inability to ingest, digest or absorb nutrients/ surgical procedure as evidenced by weight loss.*

Intervention

1. Monitor nutritional status and weigh patient daily.
2. Maintain nasogastric suction to remove fluids and gas in the stomach and prevent abdominal distention.
3. Provide oral care to prevent dryness and ulceration.
4. Keep the patient nothing by mouth as directed to promote gastric wound healing. Administer parenteral nutrition, as prescribed.
5. When nasogastric drainage has decreased and bowel sounds have returned, begin oral fluids and progress slowly.
6. Prepare proper dietary plan for the patient
7. Avoid unpleasant environment during meal times i.e. sight, smell, sound
8. Ask the patient's food preferences based on customs.
9. Eat small and frequent diet (High protein, high fat, low carbohydrate). High carbohydrate and fluids with meal which may triggers dumping syndrome i.e. rapid emptying of gastric contents.
10. Encourage follow-up with the health care provider and routine testto detect complications or recurrence.

4. *Activity intolerance related to generalized weakness, abdominal discomfort and nutritional deficit.*

Interventions

1. Assess the level of activity of the patient.
2. Assist patient with planning and scheduling activities i.e patient exercise programs
3. Evaluate patient recovery speed between sessions in order to ensure proper scheduling.
4. Encourage proper rest periods in between the activities.
5. Eliminate unnecessary activities to conserve energy and strength for important activities and ensure adequate rest.
6. Help patient develop aappropriate diet plan and eating habits to help them improve their overall health condition.
7. Assist with ADL regularly as indicated by the physician.

5. *Anxiety related to lack of knowledge of diagnostic tests, disease process and therapeutic regimen as evidenced by anger, apprehension, insomnia.*

Intervention

1. Assess the level of anxiety, the factors that influence the onset of anxiety.
2. Evaluate patient level of understanding of diagnosis.
3. Provide factual information about diagnosis, action, and prognosis.
4. Provide a comfortable relaxed environment to express their feelings, fear, anger and perception.
5. Provide opportunity for questions and answer patient and family members honestly.
6. Encourage the family to accompany the client.
7. Assess the client's expectations to treatment and care.
8. Teach relaxation techniques to reduce anxiety.

Other Nursing Needs to be Taken care

- Anticipatory grieving.
- Situational low self esteem.
- Risk for infection.
- Risk for impaired skin integrity.
- Risk for impaired family.

Conclusion

This case report of patient with gastric carcinoma will helpful for nurses, nursing educator, student nurses to understand the comprehensive nursing care of the patient with gastric carcinoma.

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