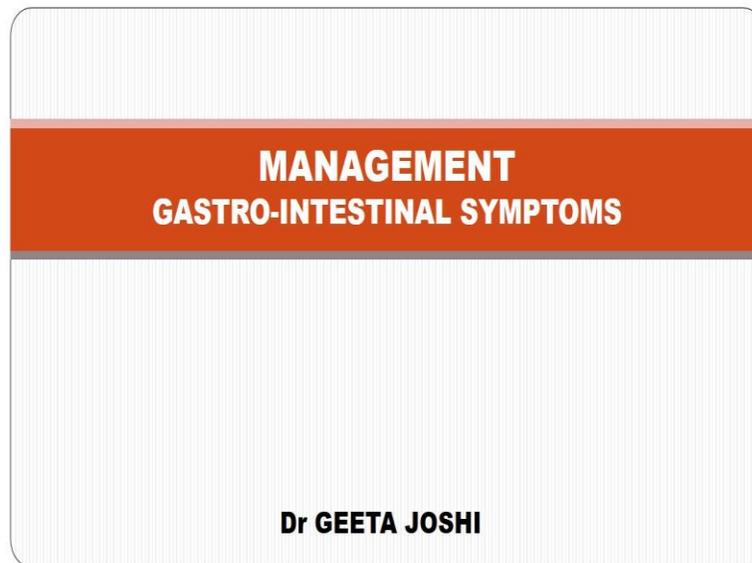


Basic Certificate in Palliative Care
Dr. Geeta Joshi
Dr. Piyush Gupta
Dr. Col. Yashavant Joshi
International Institute of Distance Learning
Indian Institute of Technology, Kanpur

Week-08
Lecture 02: Gastrointestinal Symptoms

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Namaste (Hindi word meaning greetings), in this presentation we are going to discuss about the management of gastrointestinal symptoms. As all of you know, symptoms are the complaints made by a patient.

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Management of Gastro-Intestinal Symptoms

In this Lecture, you will learn following symptoms ...

1. Nausea – Vomiting
2. Constipation
3. Diarrhea
4. Hiccups
5. Intestinal Obstruction

It is a physical complaints and usually sometimes it is so severe in palliative care scenario that it affects the quality of life of the patient. So it is very important to manage the symptom, to treat them and make the patient as comfortable as possible.

Gastrointestinal symptoms mainly we are going to discuss are nausea, vomiting, constipation, diarrhea, hiccups and intestinal obstruction.

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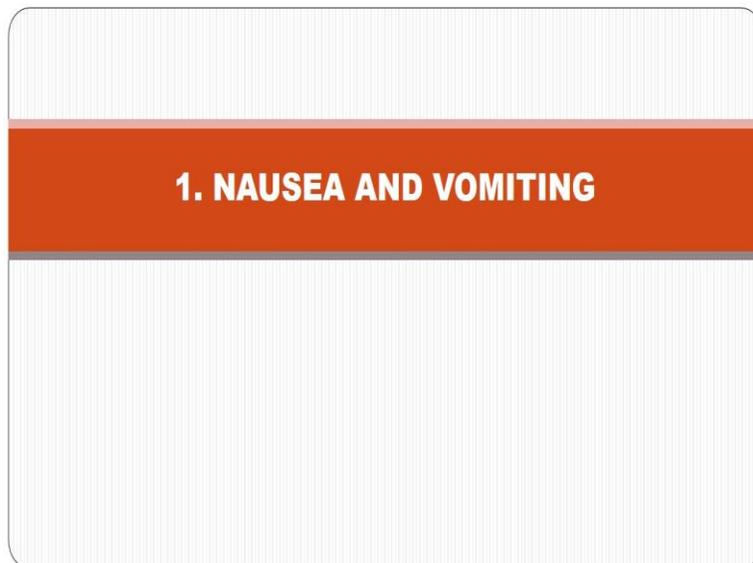
Gastro-intestinal symptoms

- A large number of Palliative Care Patients have GI symptoms
- Receives less attention than pain
- We need to pay more attention as it causes patient morbidity
- We must anticipate problems
- Ongoing assessment of treatment required.
- Background medications as well as for breakthrough symptoms

A large number of palliative care patient has gastrointestinal symptoms, particularly patients who are receiving chemotherapy, radiotherapy or other cancer treatment, they have got many of the gastrointestinal symptoms.

But they are not made much attention and doctors focus on other parts of the treatment. We need to pay more attention at its causes morbidity to the patient and sometimes these symptoms can be anticipated and can be prevented in advance by giving certain medicine. Like if patient is undergoing chemotherapy, we can give certain antiemetic drugs to stop vomiting or cause less vomiting following chemotherapy. So particularly ongoing assessment and monitoring of the patient is required and background medication as well as whenever symptoms occurs, it should be treated immediately.

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Firstly, we will be talking about nausea, vomiting.

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Nausea, Retching & Vomiting

It is a Biological defense mechanisms,
to remove toxic or harmful substances
from the body after ingestion

The process of 'emesis' can be explained
in three phases:

- Nausea
- Retching and
- Vomiting

It is a biological defense mechanism when to remove toxic or harmful substance from the body after a ingestion and certain terms which are related to MSCs are nausea, retching and vomiting.

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Definitions

- ▶ **Nausea:** The unpleasant sensation of the imminent need to vomit.
- ▶ **Vomiting:** Forceful oral expulsion of gastric contents associated with contraction of the abdominal and chest wall musculature.
- ▶ **Retching:** Spasmodic respiratory movements against a closed glottis with contractions of the abdominal musculature without expulsion of any gastric contents.
- ▶ **Regurgitation:** The act by which food is brought back into the mouth without the abdominal and diaphragmatic muscular activity that characterizes vomiting.

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Nausea is a unpleasant sensation and because of that patient does not feel like eating. Second is vomiting which is a forceful oral expulsion of the toxic substances from the body and it is associated with contraction of the abdominal and chest wall muscles.

Retching is phasmodic respiratory movements against a closed glottis with contraction of the abdominal musculature without expulsion of any gastric content and regurgitation is without any muscle contracture and it is silent expulsion of the gastric content into the mouth.

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Nausea and vomiting in Palliative Care

- Occurs in 40 – 70% patients with cancer
- Management involves accurate assessment
- Good knowledge of anti-emetic drugs
- Consider route of administration
- Control of symptom possible in 60% patients

About 40 to 70 percent of the patient who are receiving palliative care, they have nausea and vomiting and it requires accurate assessment and good knowledge of anti-emetic drugs. We should also consider the alternate route of administration as patient may not tolerate your medication when it is given orally. So, control of symptom by various drugs is possible in 60 percent of the patient.

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Causes of Nausea Vomiting in Palliative Care Patients

- | | |
|-----------------------------------|-------------------------------|
| ✓ Drug induced | ✓ Liver failure |
| ✓ Following Chemotherapy | ✓ Constipation |
| ✓ Following Radiotherapy | ✓ Gastric outlet obstruction |
| ✓ High Blood urea & Renal failure | ✓ Oesophageal causes |
| ✓ Raised Intra-cranial tension | ✓ Psychological- e.g. Anxiety |
| ✓ Opioid induced | ✓ Biochemical |
| ✓ Gastric irritation | ✓ Hypercalcemia |
| ✓ Intestinal (bowel) Obstruction | ✓ Infection |

These are various causes of nausea and vomiting in palliative care patient. It can be drug induced because of chemotherapy, following radiotherapy, because of the some kidney problem, high blood urea and renal failure, raised intra-cranial tension, opioid induced these are the medication given for pain management, gastric irritation, intestinal obstruction because of the tumor, liver failure, constipation, gastric outlet obstruction, oesophageal causes and psychological many a times patient is too anxious because of the disease or because of the disease related treatment he has to undergo and because of anxiety he feels nausea and vomiting. It could be because of the biochemical changes in the body following the disease and hypercalcemia and infection.

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Nausea and Vomiting following Chemotherapy

Types	Description
Acute	Occurring from few minutes to hours and resolving within 24 hours
Delayed	Occurring usually after 24 hours of chemo and will be worst from 48 to 72 hours following chemo and can last 6 to 7 days.
Breakthrough	Occurring despite antiemetic treatment
Refractory	Unmanageable with current antiemetic regime
Anticipatory	Conditioned response prior to chemotherapy

Following chemotherapy, nausea vomiting following chemotherapy is the main reason and main concern in all cancer patients which can be acute which happens immediately on starting of the chemotherapy. It can be delayed which occurs after 24 hour and last for 48 to 72 hours and it may last for a week also. Breakthrough, the nausea vomiting is under control, but intermittently patient gets a severe and emetic episode following chemotherapy. Refractory, sometimes this chemotherapy induced nausea vomiting can do not respond to any medication and anticipatory condition response prior to chemotherapy.

Many a patients they have certain beliefs in mind that following chemotherapy I am going to get nausea vomiting. So, by anticipatory anticipating the things patient may get nausea vomiting as soon as the patient enters the chemotherapy ward. So, these are various psychological issues related to chemotherapy and which causes nausea vomiting in palliative care patient.

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After effects of Nausea and vomiting

- **Affects patients' daily functioning**
- **Quality of Life**
- **Non compliance to cancer treatment**
- **Refusal of effective pain medications**
- **Family distress**
- **Affects Nutrition of patient**

Vomiting Centre

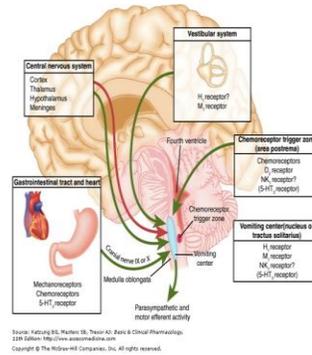
What happens if patient has continuous nausea vomiting? It affects the daily functioning of the patient definitely. Then patient is not able to eat anything by mouth.

So, likely to cause weakness and dehydration sometimes and malnutrition. Then patient becomes non-compliant to cancer treatment. Once he or she finds that because of chemotherapy there is so much of nausea vomiting. Second day, second time he will say I do not want chemotherapy. So, refusal for the medication, pain medication particularly which causes like Tramadol and all causes nausea vomiting patient may will be hesitant to take the medicine. This causes families distress into the family members and affects the nutrition of the patient.

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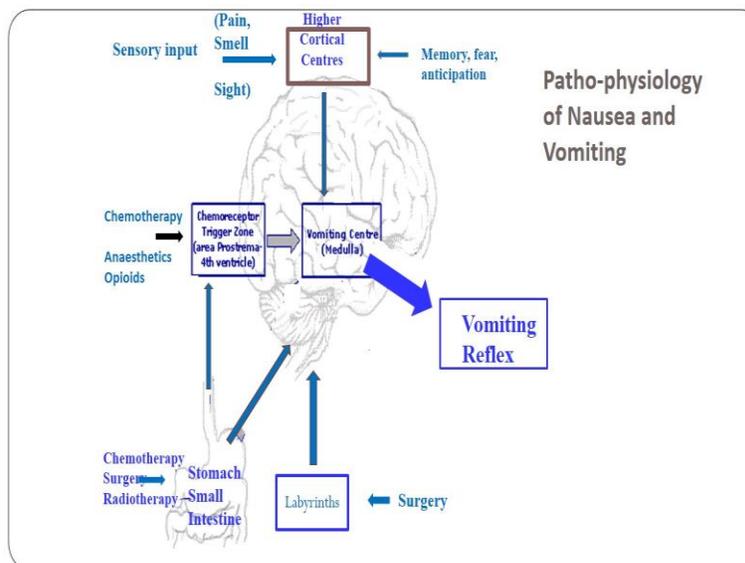
Principles of Treatment

- To stop or reduce symptom frequency
- To establish compliance to treatment
- To enable analgesic medications
- To improve quality of life



So, principle of treatment of nausea vomiting is to stop or reduce symptom frequency as far as possible to accomplish, establish compliance to the treatment giving reassurance to the patient that by this treatment your nausea vomiting will be under control and you will not be having any distress. So, by giving all such reassurance and proper medication principle of the treatment is to control nausea vomiting and to improve quality of life of patient.

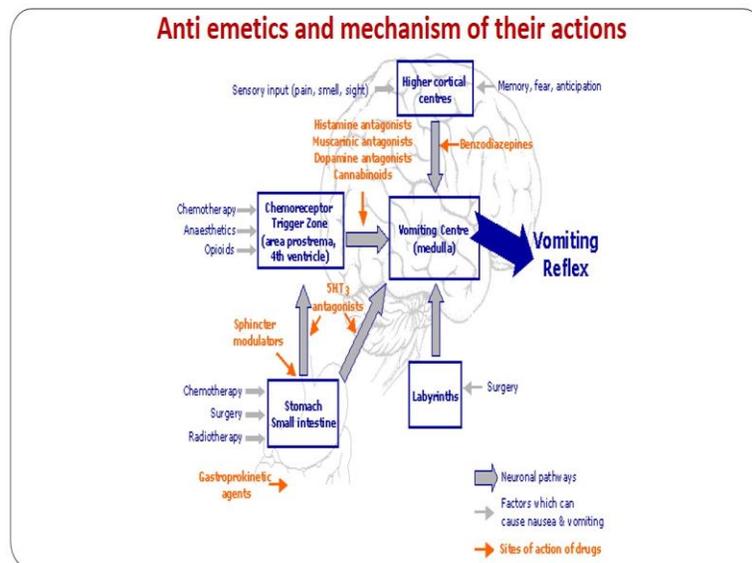
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This diagram shows the pathway of vomiting center. So, vomiting center is into the brain right and that receives stimulus from the labyrinth that is in ear from the stomach wall and from the stomach wall and that causes stimulates the vomiting center into the brain.

Sometimes cortex this center receives stimulation from the cortical centers like past memory, fear, anxiety, anticipated nausea vomiting. So, that also causes stimulation of the CTZ that is called chemo receptor trigger zone in the brain and which causes nausea vomiting.

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And we have various drugs acting at various level. Suppose, nausea vomiting is from the ear labyrinth there are certain group of medicine which act if it is from the stomach then 5HT-3 antagonists and spincter modulators drugs which will like gastric spincter or stomach spincter it gets tighten and because of that the whatever content in the stomach is there it comes out into the mouth because after vomiting. So, there are drugs acting on it and there are agents which reduces the inflammation of the stomach and decreases the nausea vomiting.

Similarly, there are certain drugs which acts at the higher center at the brain level and causes suppressive suppresses the vomiting center and decreases the nausea vomiting. This can be benzodiazepines to reduce the anxiety and all or Histamine antagonist and all which will reduce the stimulation of the vomiting center.

So, routes of administration of the drug to control nausea vomiting is very important as I said earlier because of nausea vomiting patient will not retain any drug if it is given orally.

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Routes of administration of Anti Nausea & Vomiting drugs

- As per patient's condition and preference
- Oral route is usually the best and easiest way
- If vomiting is severe, IV route / IM route/ SCCI
- Suppositories (Rectal)
- Sublingual
- Transdermal patches

**Treatment
should be
Mechanism-based,
Not generalized!**

So, as per the patient's condition we can decide the route. So, the best is oral route, but if it is continuous vomiting you can give intravenous you can give intramuscular or subcutaneous route or by rectal suppository or by sublingual route and by transdermal patches.

So, it should be treated the by mechanism based and not one drug which is not treated by patient. So, this drug does not suit each and every patient. The mechanism of nausea vomiting will be differ from patient to patient. So, accordingly you have to decide the drug which will act on in that particular patient.

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Management of nausea and vomiting

- After clinical evaluation, Document the most likely cause(s) of N&V.

Examples:

- Gastric stasis
- Intestinal obstruction,
- Biochemical
- Drugs
- Raised intracranial pressure.
- Ask the patient to record the symptoms and response to treatment, preferably using a diary
- Correct the correctable causes/ exacerbating factors..
eg: Drugs, Severe pain, Infection, Cough, Hypercalcemia and Anxiety

So, first of all try to find out the cause of the nausea vomiting whether it is because of gastric stasis means gastric outlet obstruction.

So, stomach does not allow anything to go further into the small intestine and patient vomits it out or maybe because of the intestinal obstruction some biochemical changes drugs and raise intracranial patient. So, ask the patient to record the symptoms and response to the drug educated patient can maintain a diary and how frequently he got vomiting or nausea and which event caused the nausea and how it was relived whether he was relived with the particular drug, particular dose of the drug that he can maintain. First and foremost step towards management of nausea vomiting is the correct the correctable cause or exaggerating factors like drugs. If you know patient is on tramadol and that is causing nausea vomiting you can stop tramadol and find some alternate analgesics. Severe pain sometimes pain which is not relived also causes nausea vomiting any infection cough hypercalcemia and anxiety all these precipitating factors should be considered.

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Management Continued...

- Prescribe the most appropriate anti-emetic stat, regularly, and p.r.n
- Choose parenteral route if continuous nausea and/ frequent vomiting
- Prokinetic Anti-emetics:
for gastritis, gastric stasis, functional bowel obstructions-
eg: Metaclopramide
- Anti-emetics acting principally on CTZ:
for most chemical causes of vomiting - eg: Haloperidol

Then you prescribe the most appropriate anti-emetic drugs depending on the mechanism which is causing nausea vomiting and choose parenteral route if it is a continuous means you choose IV. Prokinetic anti-emetic like which will act on the gastric stasis are is metaclopramide it will increase the it will open up the gastric outlet of obstruction to some extent and it will propel the food towards the small intestine. So, it will it is very effective in the small bowel obstruction. Drugs which act centrally on the CTZ that is a vomiting center is haloperidol which is very useful very much useful when the nausea vomiting is caused by the central stimulation like morphine induced nausea vomiting or sometimes anxiety induced nausea vomiting.

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General principles of Management

- Single anti-emetic may not be adequate
- Multiple causes may require combination
e.g., for Raised ICP & Uremia
Dexamethasone, Haloperidol – metoclopramide
- Persistent vomiting – subcutaneous preferable
- Keep in mind side-effects :
e.g. extra pyramidal, Constipation

General principle you should keep in mind that sometimes only one drug may not act and you have to give combination of the drug like a patient who is anxious and also having gastric outlet obstruction you can give metoclopramide as well as diazepam to calm down his central nervous system.

Multiple causes may require combination persistent vomiting in persistent vomiting you can give subcutaneous route that is just below the skin you insert a cannula and inject the drug. Of course when you are using certain drugs like Metoclopramide it gives extra pyramidal system extra pyramidal symptoms and one should keep in mind the side effect of this drug and few of the drugs do cause constipation like ondansetron and all.

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Causes of NV	Treatment of NV
Drug induced	Haloperidol 1.5 to 2.5 mg at night / bd
Radiotherapy	1. Ondansetron 8 mg stat then 4 mg tds OR 2. Inj Granisetron 1 mg stat then 1 mg bd
Chemotherapy	1. Ondansetron / Granisetron as described above 2. Dexamethasone 8 mg od for 3 days. 3. Metoclopramide 10 to 20 mg qds, Orally/Subcutaneous 4. NK1 antagonist- Aprepitant
Metabolic eg. Uremia	Haloperidol – start with 1.5 mg at night
Raised Intracranial Pressure	Inj Dexamethasone 8 to 36 mg IV
Bowel Obstruction	If partial, no colic, give Metoclopramide If colic, Inj Hyoscine Butylbromide (Buscopan) 40 to 100 mg/24 hrs. Inj Ondansetron 8 to 24 mg/24 hrs IV/SC OR Tablet to be given orally
Delayed Gastric Emptying Gastric Irritation	Tab Metoclopramide 10 20 mg qds Tab Domperidone 10 to 20 mg qds Stop irritant, Start PPIs (e.g. Pantaprazole)

So, this table shows on left hand side causes of the nausea vomiting on other side is the treatment. If it is drug induced usually haloperidol acts, if it is radiotherapy induced usually ondansetron or granisetron is effective. If chemotherapy induced nausea vomiting we have got multiple many anti-emetic drugs and very new drugs has also evolved in last decade or so and very effective and that because of that we can give chemotherapy very safely to a very large group of patients.

This may be ondansetron, dexamethasone, metoclopramide and NK-1 antagonist, aprepitant which is a newly introduced drug since last more than a decade or so. If the cause of nausea vomiting is metabolic like uremia you can give haloperidol, raise intracranial pressure again dexamethasone, if bowel obstruction, metaclopramide or with colic you can give buscopan or ondansetron and delayed gastric emptying and gastric irritation again you can give metoclopramide, domperidone and pantoprazole. So, these are the drugs which are has been listed as per the etiology or cause of the nausea vomiting.

Many of our palliative care patients are on opioid for pain management and few patients are sensitive to opioid and it they have severe nausea vomiting restricting the use of the opioid.

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Opioid induced Nausea & Vomiting

- Different mechanisms may be at play :
CTZ, increased vestibular sensitivity
gastric stasis, Constipation
- Drug of Choice : Haloperidol, Metoclopramide
- Prescribe antiemetics initially when you start opioid treatment
- Treat N / V aggressively before reducing opioid

In these patients usually they the mechanism is because of the stimulation of the CTZ that is central vomiting center or increase vestibular sensitivity, gastric status and particularly constipation.

This is very common in patients who are taking morphine or other opioids and constipation is very common which can cause nausea vomiting. So, here the drug of choice is centrally acting drug which is haloperidol and if it is because of gastric status you give metoclopramide. So, in few of the patient you might have to give antiemetic drugs right with the at the beginning of the opioids treatment. So, patient is not likely to get nausea vomiting. So, and can aggressively reduce and treatment is very important before reducing the opioid.

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Role of Dexamethasone in vomiting

- ▀ **By reducing the permeability of CTZ and of the Blood-brain barrier for emetogenic substances**
- ▀ **By reducing the neuronal content of Gamma Amino butyric acid (GABA) in the Brain stem**
- ▀ **By reducing the inflammation at the site of obstruction and thereby increasing the lumen**
- ▀ **By reducing the pressure on the intestinal nerves and correcting neural dysfunction**

Dexamethasone has got a very good role to play in nausea vomiting particularly chemotherapy induced nausea vomiting. It reduces permeability to CTZ and blood vein barrier to a emetogenic substances. It reduces neuronal content of the gamma amino butyric acid in brain stem. It reduces inflammation at the site of obstruction like in gastric stasis or gastritis and all and by reducing pressure on the intestinal nerve it reduces nausea vomiting.

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Principles of management

- **Review the anti emetic dose every 24 hrs. taking note of p.r.n. use and the patient's diary**
- **If inadequate response despite optimising the dose of anti emetic , review the diagnosis**
- **If diagnosis is found to be the same, change to an alternative anti-emetic and optimize the dose.**
- **Add a second anti-emetic if needed**

So, review the dose of whenever you start the treatment every 24 hours you review the dose, review the requirement of the number of drugs and evaluate the cause repeatedly till patient is totally treated.

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Steps in the Management of Nausea / Vomiting

- ▶ Establish a likely cause.
- ▶ Identify the most likely pathway.
- ▶ See which receptors are involved.
- ▶ Choose the most potent antagonist.
- ▶ Choose the most appropriate route of administration.
- ▶ Review after 24 hrs, add other drug.
- ▶ Opt for regular rather than PRN dosing.
- ▶ Titrate the drug dose accordingly.
- ▶ Reassure patient/ family.

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So, this is just to list down the steps which we already discussed like establish the cause, try to find out the pathway which is causing nausea vomiting. So, select the drug you might have to select more than one drug you evaluate every 24 hours and regulate the dosing and titrate the drug accordingly and reassurance of patient and family is very very important in and, these are some of the things that we have some of the non pharmacological means to treat the nausea vomiting.

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Non-pharmacological management

- Fresh air with a fan or open window
- Bed rest to avoid vestibular stimulation
- Good oropharyngeal hygiene, Keep your mouth clean
- Nurse in the upright position
- Avoid situations which induce N&V e.g. Smell of food while cooking
- Suitable distractions
- Reassurance, support, counseling
- Wear loose fitting clothes
- Limit sounds, sights, and smell that cause nausea and vomiting
- Call your doctor / nurse if your N/V is not controlled

Patient should be sitting in a fresh air with cool atmosphere and properly proper bed rest and good oropharyngeal hygiene oral hygiene and keep the mouth clean nurse in upright position. Sometimes smell of certain food also causes nausea vomiting. So, isolate the patient from the surrounding of the kitchen where he is likely to have such smell.

Suitable distraction whatever he is interested like in music or see watching TV or reading book give that opportunity to him. Reassure counselor support wear loose fitting clothes and limit sometimes patient whenever you are sick you know that you do not like sound or light or anything. So, make him comfortable whatever way they want and call the doctor if it is not controlled.

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Distractions

- Self hypnosis
- Progressive muscle relaxation
- Biofeedback
- Systematic desensitization
- More useful in anticipatory vomiting
- Can be used alone or together with anti-vomiting drugs
 - Promote relaxation, which may decrease nausea and vomiting
 - Serve to distract the individual's attention
 - Enhance feelings of control
 - Reduce feelings of helplessness
 - They have no side effects and can be used by anyone

Distractions like many people can practice self hypnosis biofeedback at more useful in anticipatory nausea vomiting. Muscle relaxation technique meditation relaxing technique and feeling they should feel that now this thing I can control myself that type of assurance should be given and reducing the feeling of helplessness.

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Nutritional advice during nausea and vomiting

- Try to eat small frequent meals rather than three large meals
- Try consuming most foods during the time of the day when able to eat better
- Many people find that breakfast time is best
- Eat foods and drink that are "easy on the stomach"
- Do NOT force yourself to eat when nauseated
- Cold food or at room temperature are better tolerated
 - ▶ Try to avoid fatty / sweet / spicy food
 - ▶ Avoid fiber
 - ▶ Avoid carbonated drinks

What type of nutrition they should be given? So, they should patients having nausea vomiting should take small frequent meals rather than large meals and during the time of

the day when they want to have meal eat better like most of us can eat better in the morning hours during breakfast and night hours usually patient does not feel like eating. So, give them proper food at the proper timing. Then more of a drinks liquid diet and do not force the patient to eat. In presence of nausea vomiting this is very important give the food of their choice and cold food or at room temperature are better tolerated. Avoid very fatty food or spicy food or very too sweet food avoid fiber which causes so much of bulk in the stomach.

So, and avoid carbonated drinks these are the dietary advice given to the patient who are suffering from nausea vomiting.

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Diet advice continued...

- **Make someone else to make food, if you are nauseated**
- **If a person is having difficulty in eating his special diabetic or heart disease diet, their diet requirements can be relaxed**
- **A dietitian can be consulted to provide more tips to help eating**

Someone else someone cannot cook the food while having nausea vomiting. So, somebody else should cook the food for them if he is having difficulty in eating special food like diabetic patient having restriction in eating sweets, but during nausea vomiting he may feel like eating sweet though remove that restriction for few days and tell them to eat whatever they like and give them relaxation. Dietitian also can be consulted.

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**Management of nausea and vomiting
in palliative care -Guidelines**

- Document most likely causes.
- Treat potentially reversible causes and exacerbating factors
(e.g. Drugs, constipation, severe pain, infection, cough)
- Review dose after 24 hours
- If N & V persist after 24 – 48 hours, review cause.
- Remember 1/3 of patients will need > 1 anti emetic.
- If on parenteral, consider converting to oral after 72 hours of good control, to oral regimen

Management again consists of documentation also proper drug which is given exaggerating factor, reducing factor, review after 24 hours more than 1 or 2 antiemetic and consider the route.

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2. CONSTIPATION

Now, we will talk about constipation. As a lay person we feel that constipation is okay regular it can happen to anybody and it can be relived, but it is not so in cancer patient particularly and patients who are on palliative care.

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Constipation

Subjective feeling: "What the patient says"
Normal habit may be, Twice a day or Once in 2 days

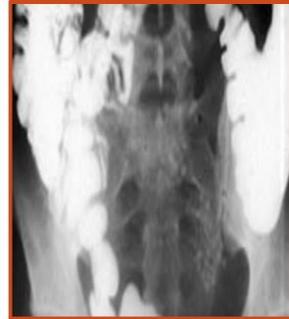
- Difficult or painful defaecation and is associated with infrequent bowel evacuations and hard faeces
- A subjective feeling: "how it is different from their normal"
- 45% of Palliative Care patients are constipated on admission

So, what is constipation? It is a subjective feeling and what the patient says you have to believe and his normal habit may be twice a day or once in 2 days, but when he is this normal habit is disturbed it is called constipation. About 45 percent of the palliative care patients are constipation on admission.

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Constipation can lead to...

- ▶ Feeling of incomplete evacuation
- ▶ Bloating feeling
- ▶ Nausea and Vomiting
- ▶ Abdominal cramps / pain
- ▶ Bowel obstruction,
- ▶ Overflow diarrhea
- ▶ Urinary retention



What happens if constipation is not treated? Patient will feel heaviness in the stomach, abdomen, incomplete sensation of incomplete evacuation, bloated feeling, constipation may lead to nausea vomiting, abdominal cramp, pain, bowel obstruction, overflow diarrhea sometimes the hard stool is impacted into the rectum and some soft stool coming out frequently. So, patient may feel I am having diarrhea, but in fact it is because of the constipation and urinary retention.

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Causes of Constipation

- ▶ **Pharmacological:** Opioids(90%), Anti depressants, Anti-cholinergic, Anti epileptics, Anti emetics, Antacids, Somatostat in analogues
- ▶ **Metabolic:** Dehydration, hypercalcemia, hypokalemia, uremia
- ▶ **Diet:** Poor appetite, low fluid and fiber intake
- ▶ **Environment:** Hospitalization, Inability to attend to the call
- ▶ **Neurological:** Malignant spinal cord compression, Sacral Nerve infiltration
- ▶ **Structural:** Pelvic tumors, RT induced fibrosis, painful anorectal condition, intra-luminal obstruction
- ▶ **Others :** Depression, weakness, immobility, inactivity, sedation, age

There are many causes of constipation in palliative care setup. Many pharmacological many patients who are on opioids that is morphine and like drugs 90 percent of them have constipation. Then patient taking anti-depressant, Anticholinergics drug, Antiepileptic, antiemetic, antacids, all these patients are likely to get constipation. Then metabolic causes dehydration these patients take less fluids orally, less water orally, water intake is very much less that causes constipation, hypercalcemia, hypokalemia and uremia. Then diet most of our cancer patients because of over going treatment like chemotherapy and radiotherapy they cannot eat much sometimes disease itself causes anorexia.

So, they cannot eat much. So, poor appetite, low fluid intake and low fiber intake can lead to constipation. Sometimes they are put up in hospital for many days and they are not able to attend the natural call because of the unfamiliar surrounding they get constipation. Neurological problems like spinal cord compression, sacral nerve infiltration will cause constipation. Structural many patient has got tumor lying in on the rectum in the pelvis or radiation induced fibrosis and painful anorectal condition will cause constipation and others are psychological also like depression, weakness, immobility, inactivity, sedation, age related constipation. So, these are the various causes of constipation.

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Assessment

- What is normal for the patient?
Frequency, amount, consistency, blood stained or not
- When was the last bowel movement?
- Is the patient experiencing any abdominal discomfort, cramping, nausea and vomiting, excessive gas or rectal fullness?
- Does the patient regularly use laxatives?
- What medications are the patient on?
- Is constipation a recent change?
- What type of diet is the patient on?

First of all assess the patient try to find out what was his normal frequency, what was the normal way he used to pass the stool and what is the condition now, what is the situation now. Ask them when the last bowel movement was taken place. Many a times we do not ask this and we just we just ask the patient do you have constipation patient will say yes, but when you go into the detail you will realize one of my patient he had constipation since one month. So, when he was admitted in my hospice and I inquired that are you passing stool normally all of his family member said he is not eating only then why he should pass the stool. So, since patient has not passed stool for one month that was normal for that family because their belief was that if you are not eating you will not pass the stool, but the fact is like this even if you are not eating there is a stool formation into the body every third to fifth day that is because of the bacterial activities and all.

So, stool is formed and every even if you are not eating you should be able to evacuate or bowel every third or fifth day. So, the inquire about whether they are taking any laxative any other medicine they are taking is there a constipation a recent change or abhi abhi hua hai pahle se hain (Hindi phrase meaning it just happened it already happened) what type of diet is patient. So, all these detail assessment is required.

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Management of constipation

- ❖ **Correct the correctable**
- ❖ **Judicious use of laxatives**
- ❖ **Improve general condition**
- ❖ **Symptom control**
- ❖ **Encourage activity**
- ❖ **Fiber – diet**

In the management first is correct the correctable use laxatives that is the medicine used to evacuate the bowel improve general condition symptom management encourage activity and fiber diet change the fiber diet.

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Non Pharmacological Measures

- ▶ Access and ability to go to toilet
- ▶ Timing and privacy
- ▶ Squatting position
- ▶ In bed, feet under knees and gentle blowing, arms resting on thighs
- ▶ Encourage normal balanced diet and plenty of water.

Patient should have access to a good toilet clean toilet with privacy many a time this is not possible in hospital or in a when patient attends to some hospital for OPD visits and all and so he is not able to pass stool.

Timing privacy is squatting position some patient prefer Indian style of toilet against the our WC and in bed feet under knee and gentle blowing arm resting on thigh encourage normal balance diet and plenty of water.

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Create Favorable Environment Educate Patient and Family

- Common to Hear :
- “Not eaten enough at all. How will she / he pass motion?”
- “I have diarrhea” (overflow)

A patient with less/no intake

- Large bowel transit take 3-4 days even in normal people.
- stool contains shed epithelium and a major bulk is the by-product of bacterial action.
- Even if patient has not taken any food for a few days, he may need bowel care.

So, this is common thing which I describe just few minutes ago that not eaten enough. So, he will not pass stool and as I said the large bowel transit take 3 to 4 days even in normal people and stool contain shed epithelium lining of the large bowel and bacterial action because of that person has to pass stool every 3 or 5 days.

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Treatment of Constipation

- ❖ Rectal Examination
- ❖ Proper use of the right laxatives
- ❖ Suppositories
- ❖ Enema – Proctoclysis (Glycerine)
Warm Saline / Plain Water
- ❖ **Do not give soap water enema**
- ❖ Digital evacuation for faecal impaction

So, treatment of constipation first of all you have to do rectal examination whether patient is having hard stool or soft stool or there is no stool at all and accordingly you have to select the drug to relieve the constipation. Laxative suppository or enema depending on the type of stool patient has.

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Pharmacological Management - Laxatives

- Stool Softeners
 - Docosate
 - Liquid Paraffin 3 tsp (15ml) up to 3 times a day
- Stimulant Laxatives
 - Senna
 - Bisacodyl – 2 tabs up to 4 a day
- Bulk-Forming
 - Isapgul – not used
- Osmotic agents
 - Lactulose

There are number of laxiative available in our practice. Stool softness contains usually we use is liquid paraffin, stool stimulants, tablet bisacodyl and bulk forming laxatives that is isapgul usually not used in palliative care scenario and osmotic agent lactulose.

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Considerations Using Laxatives

- ▶ Paraplegic patients need regular stimulants and stool softeners.
- ▶ May need initial manual evacuation.
- ▶ Patients with colostomies are treated in the same manner.
- ▶ After obstruction is excluded, Bisacodyl suppository can be used but it is less well absorbed and oral tablets need to be added.

- ▶ Soft stools- Bisacodyl suppository
- ▶ Hard stools- Glycerine suppository
- ▶ Empty rectum- oral stimulants, high oil enema

So, depending on the patient's condition and cause of constipation you have to select the drug. So, in paraplegic patients what they need is a regular stimulant and stool softener. Many patient require manual evacuation of the stool if it is hard stool and impacted into the rectum. So, patient with colostomy are treated with the same manner.

After obstruction is excluded you can give bisacodyl suppository and oral tablet as per requirement. So, if there is a soft stool into the rectum use bisacodyl suppository. If it is a hard stool in the rectum use glycerine suppository and if there is no stool, but patient is complaining of constipation give oral stimulant or high level enema.

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Impaction of faeces and overflow diarrhea

- Longer the stools stay in the gut
- more is the absorption of water
- leading to severe constipation

“Over flow diarrhoea” – Spurious diarrhoea

Sometimes when patient has long standing constipation there is a hard stool impacted into the rectum and whatever new stool is formed in form of soft stool it passes out from the impacted surrounding area of the impacted stool.

This is called overflow diarrhea. In this situation patient will complain of diarrhea, but in fact patient is having constipation. So, you have to do rectal examination of the patient in this condition. It is also called spurious diarrhea.

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Treatment of faecal impaction

- If soft faeces palpable P/R.....Biscodyl suppositories
- If hard faeces palpable P/R
- ✓ Bisacodyl and Glycerol suppositories
- ✓ Plain warm water/Saline enema
- ✓ Sodium phosphate enema and Oral Laxatives
- ✓ Manual evacuation with lubrication

In these patients if the stool is palpable soft stool is palpable put a bisacodyl suppository in the rectum. If it is a hard stool palpable glycerol suppository, bisacodyl and glycerol suppository and plain water enema.

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Manual evacuation

- Proper explanation about the procedure and informed consent
- Sufficient lubrication preferably with local anaesthetic jelly
- Allowing enough time for the local anaesthetics to act
- Gently and slowly doing the procedure with careful watching of the patient's reaction and acceptance, at the same time keep talking with the patient

No soft water enema is given in palliative care setup and finally, one might have to go for manual evacuation with lubrication. In manual evacuation you explain the procedure to the patient give proper position use proper lubricant and then without causing much trauma we should remove the impacted stool. So, after that the normal form stool will come out naturally. Thank you very much.