Community-Based Primary Palliative Care Community of Practice Series 4

Interventions for symptom management: tubes and drains

Project ECHO
Palliative Care - Canada
BY Pallium Canada

Facilitator: Dr. Nadine Gebara
Guest Speaker: Heather Whalen RN, CPC and Dr. Benjamin Kaasa MD, MScCH, CCFP
Date: July 23rd, 2025

Territorial Honouring

The Palliative Care ECHO Project

The Palliative Care ECHO Project is a 5-year national initiative to cultivate communities of practice and establish continuous professional development among health care providers across Canada who care for patients with life-limiting illness and their families.

Stay connected: www.echopalliative.com

The Palliative Care ECHO Project is supported by a financial contribution from Health Canada. The views expressed herein do not necessarily represent the views of Health Canada.

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Project ECHO Palliative Care - Canada BY Pallium Canada

LEAP Core

- Interprofessional course that focuses on the essential competencies to provide a palliative care approach.
- Taught by local experts who are experienced palliative care clinicians and educators.
- Delivered online or in-person.
- Ideal for any health care professional (e.g., physician, nurse, pharmacist, social worker, etc.) who provides care for patients with life-threatening and progressive life-limiting illnesses.
- Accredited by the CFPC and Royal College.

Pallium Canada

LEAP CORE

Learn more about the course and topics covered by visiting

www.pallium.ca/course/leap-core

Objectives of this Series

After participating in this series, participants will be able to:

- Augment their primary-level palliative care skills with additional knowledge and expertise related to providing a palliative care approach.
- Connect with and learn from colleagues on how they are providing a palliative care approach.

Overview of Sessions

Session #	Session Title	Date/ Time
Session 1	Pain Management in the Delirious Patient	January 22, 2025 from 12 to 1pm ET
Session 2	Communication: Part 1	February 26, 2025 from 12 to 1pm ET
Session 3	Communication: Part 2	March 27, 2025 from 12 to 1pm ET
Session 4	Palliative Care for those Living with Dementia	April 23, 2025 from 12 to 1pm ET
Session 5	Gastrointestinal Symptoms in Palliative Care	May 28, 2025 from 12 to 1pm ET
Session 6	Palliative Care for Adolescents and Young Adults	June 25, 2025 from 12 to 1pm ET
Session 7	Interventions for symptom management; tubes and drains	July 23, 2025 from 12 to 1pm ET
Session 8	Intimacy and Sexually in Advanced Serious Illness	August 27, 2025 from 12 to 1pm
Session 9	Tissue Donation at End of Life	September 24, 2025 from 12 to 1pm ET
Session 10	Supporting Caregivers	October 29, 2025 from 12 to 1pm ET

Welcome & Reminders

- Please introduce yourself in the chat! Let us know what province you are joining us from, your role and your work setting
- Your microphones are muted. There will be time during this session when you can unmute yourself for questions and discussion.
- You are welcome to use the chat function to ask questions and add comments throughout the session
- This session is being recorded and will be emailed to registrants within the next week.
- Remember not to disclose any Personal Health Information (PHI) during the session
- This 1-credit-per-hour Group Learning program has been certified by the College of Family Physicians of Canada for up to **10 Mainpro+** credits.

Disclosure

Relationship with Financial Sponsors:

Pallium Canada

- National registered charitable organization
- Funded by Health Canada

Disclosure

This program has received financial support from:

- Health Canada in the form of a contribution program
- Generates funds to support operations and R&D from Pallium Pocketbook sales and course registration Fees

Facilitator/ Presenters:

- Dr. Nadine Gebara: Nothing to disclose
- Dr. Benjamin Kaasa: Nothing to disclose
- Heather Whalen: Nothing to disclose

Disclosure

Mitigating Potential Biases:

- The scientific planning committee had complete independent control over the development of course content

Introductions

Facilitator:

Dr. Nadine Gebara, MD CCFP- PC
Clinical co-lead of this ECHO series
Palliative Care Physician at Toronto Western Hospital, University Health Network
Family Physician at Gold Standard Health, Annex

Panelists:

Dr. Haley Draper, MD CCFP- PC
Clinical co-lead of this ECHO series
Palliative Care Physician at Toronto Western Hospital, University Health Network
Family Physician at Gold Standard Health, Annex

Dr. Roger Ghoche, MDCM CCFP-PC, MTS
Palliative Care and Rehabilitation Medicine, Mount Sinai Hospital-Montreal

Jill Tom, BSN CHPCN ©
Nurse Clinician for palliative Home Care
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Regional Clinical Nurse Specialist (CNS-C), Palliative End of Life Care
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Home and Community Care Support Services Toronto Central

Claudia Brown, RN BSN
Care Coordinator, Integrated Palliative Care Program
Home and Community Care Support Services Toronto Central

Rev. Jennifer Holtslander, SCP-Associate, MRE, BTh
Spiritual Care Provider

Introductions

Guest Speaker:

Heather Walen RN, CPC

Registered Nurse, SE Health

Palliative Lead

Benjamin Kaasa, MD, MScCH, CCFP (he/him)

Family Physician, TW Family Health Team
Program Medical Director, Primary Care, UHN
Assistant Professor, Department of Family and Community Medicine
University of Toronto

Drains and Tubes in Palliative Care Patients: A Case-Based Approach

Session Learning Objectives

Upon completing the session, participants will be able to:

- Understand the role of tubes and drains in managing symptoms such as urinary retention, pleural effusions, ascites and bowel obstructions.

- Evaluate the benefits and burdens of tubes and drains in end-of-life care

Why this matters

- Complex medical devices are increasingly managed at home
- Early detection of complications and appropriate care prevents hospitalizations
- Holistic, team-based care approach is critical

What questions do you have about drains and tubes in palliative care?

Case based discussion

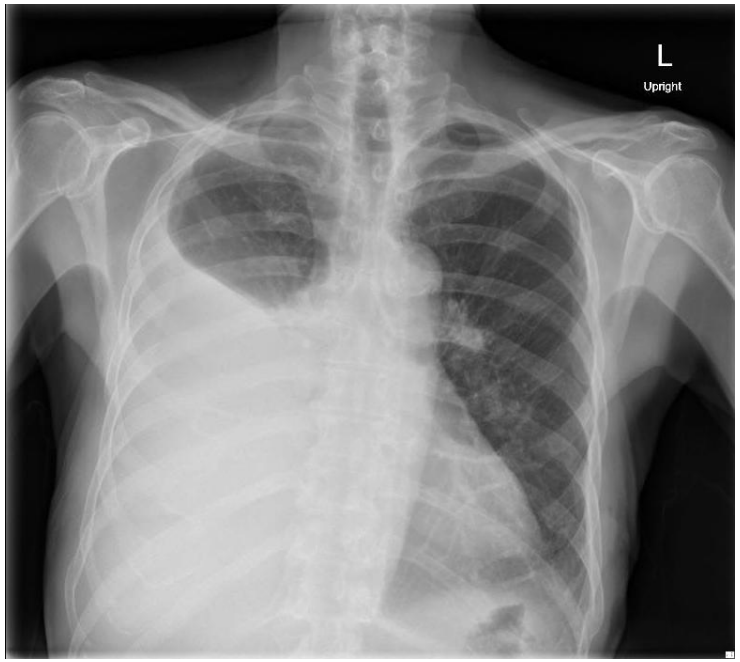
Case 1: Dyspnea

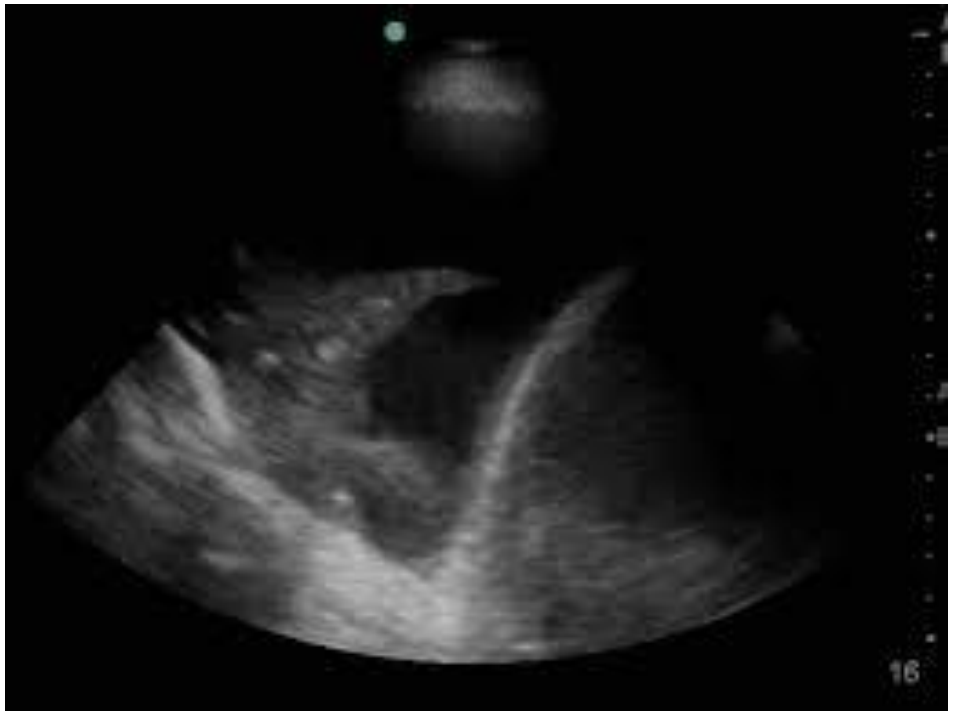
Ms. Catch is a 72 yr old female with lung cancer who you are seeing for progressive dyspnea. You hear decreased breath sounds in almost the entire right thorax on auscultation and you worry about a pleural effusion.

What would be your next step

Case 1: Dyspnea

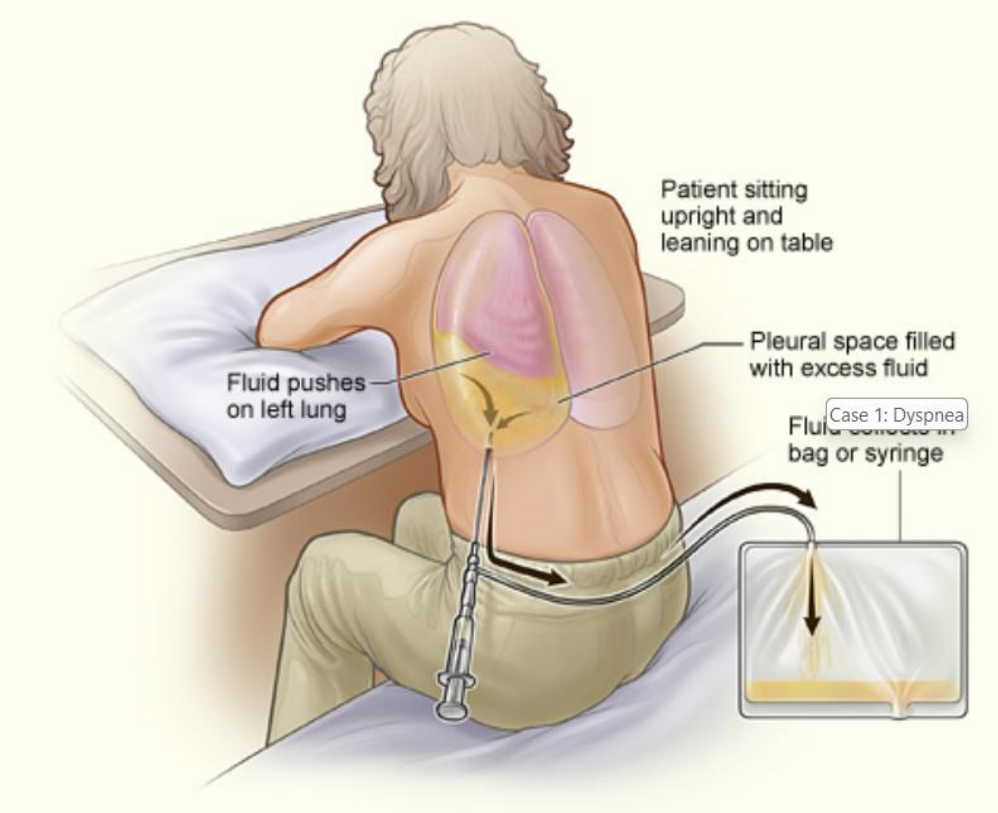
Ms. Catch is a 72 yr old female with lung cancer who you are seeing for progressive dyspnea. You hear decreased breath sounds in almost the entire right thorax on auscultation and you worry about a pleural effusion.





Case 1: Dyspnea - Thoracentesis

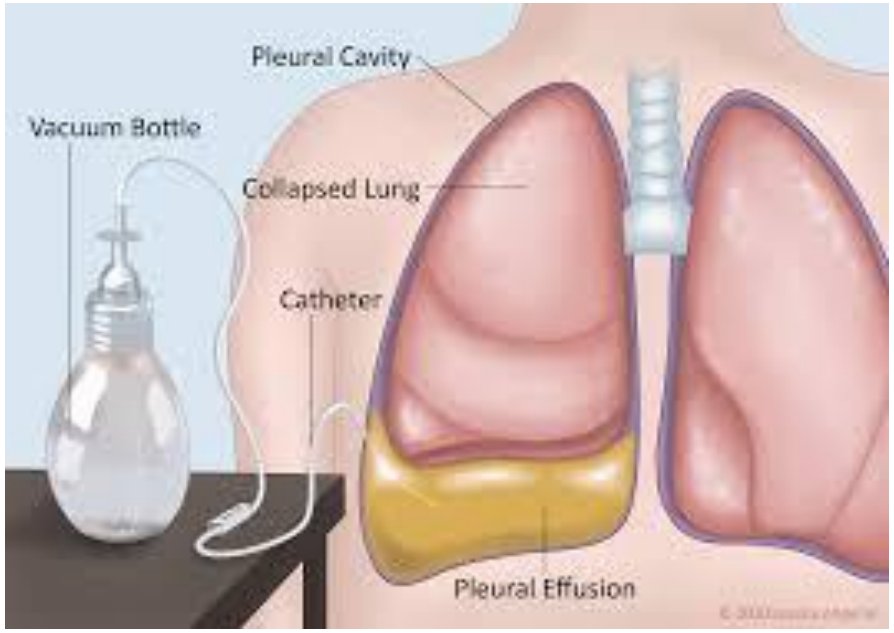
You elect to refer/perform a thoracentesis



1. Review x-ray and bloodwork
2. Perform POCUS to identify pocket of fluid
3. Clean and drape site ensuring needle will enter just over top of rib
4. Anesthetize area
5. Insert catheter and remove fluid via vacuum containers

Case 1: Dyspnea – pleural catheter

Ms. Catch receives gains significant benefit from the thoracentesis and goes weekly; however, on your next visit, she speaks of the significant challenge involved with going to the hospital and asks if you can drain at home.



Case 1: Dyspnea – How to drain a pleural catheter

The equipment will include:

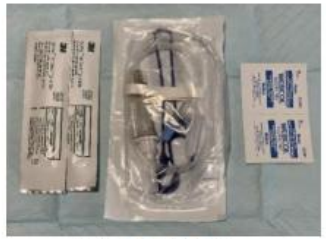
- A drainage device
  - The drainage device will either be a

suction bottle

or

empty sterile IV bag

- Sterile secondary intravenous (IV) tubing



secondary IV set

Alcohol or chlorhexidine swabs

RACE Clinic, UHN: Tenckhoff Catheter: Instruction Manual and Information Guide

1. Gather Equipment and wash hands
2. Suction container:
   a) Clean the end of the adaptor
   b) Attach the suction bottle to needleless adaptor on the pleural catheter and ensure all clamps are closed
   c) Open the clamp at the base of the suction and then on the tubing.
   d) Monitor patient and drainage. If patient starts to cough, stop the drainage for a few minutes then reopen at a slower rate. If the patient has chest pain or the cough doesn't stop, stop the drainage.
   e) Continue to drain until above symptoms, the fluid stops or 1-1.5 L has removed
   f) Unscrew the tubing, Re-dress the adaptor and catheter. Mark the amount of fluid

Case 1: Dyspnea – How to drain a pleural catheter

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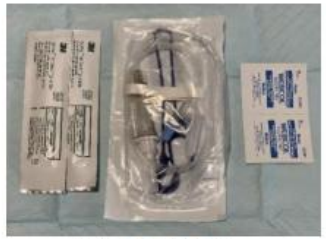


secondary IV set

Alcohol or chlorhexidine swabs

RACE Clinic, UHN: Tenckhoff Catheter: Instruction Manual and Information Guide

1. Gather Equipment and wash hands
2. Sterile IV Bag:
   a) Clean the end of the adaptor
   b) Aseptically, attach the IV tubing into the IV bag and drain fluid from bag into sink.
   c) Attach the IV tubing to the needle less adaptor and close all clamps.
   d) Put the IV bag lower than the patients chest. Allow the fluid to drain with gravity (this will take time)
   e) Wait 5 min after the fluid stops draining, close the clamp and unscrew the tubing. Mark the amount of fluid that is removed.
   f) Re-dress the pleural catheter

Case 1: Dyspnea – How to drain a pleural catheter

Pleural Drainage Colours					
DRAINAGE COLOUR	Yellow	Bloody	Brown	Dark Green	White/Dark Yellow
APPEARANCE	"Urine", clear 	"Cranberry juice" 	"Tea or coffee" 	"Green juice" 	Pus, opaque 
CONCERN?	✓ No cause for concern	✓ No cause for concern	✓ No cause for concern	✓ No cause for concern	⊗ **NOT NORMAL-INFECTION. Contact the physician ASAP.**
The patient's pleural fluid colour may change overtime. This is not uncommon and should not be something to be concerned about. This is dependent on the disease process and is an expected finding.					

RACE Clinic, UHN: Tenckhoff Catheter: Instruction Manual and Information Guide

Case 1: Dyspnea – pleural catheter

Benefits

- Allows daily/as-needed drainage with aseptic technique
- Can be conducted in the home
- No requirement for repeated invasive procedure

Trouble shooting

- Slow drainage/no drainage
- Vitals to be completed prior to start drainage
- Drop in blood pressure
- Pain when draining

What to watch for

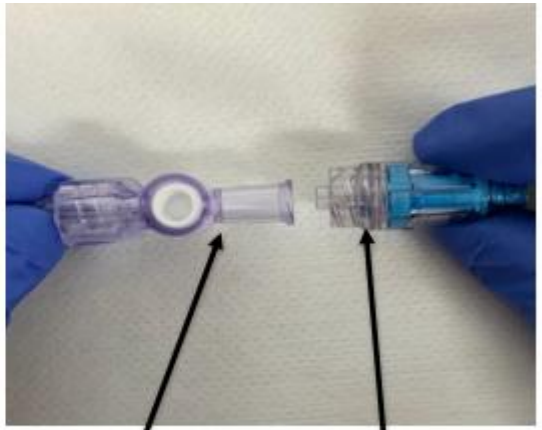
- Shortness of breath
- Non-productive cough
- Chest pain / fullness
- Decreased breath sounds or bronchial
- breath sounds
- Changes in colour of fluid ie purulent, bloody, etc

Case 1: Pleural catheter - Troubleshooting

What to do if the catheter isn't draining:

- Ask patient to: cough/take deep breaths, change positions (lie on side, lie on back) – retry
- Change the needleless adaptor
- Flush catheter with 10 cc of sterile saline (need a medical order)


Needleless adaptor (MaxZero)

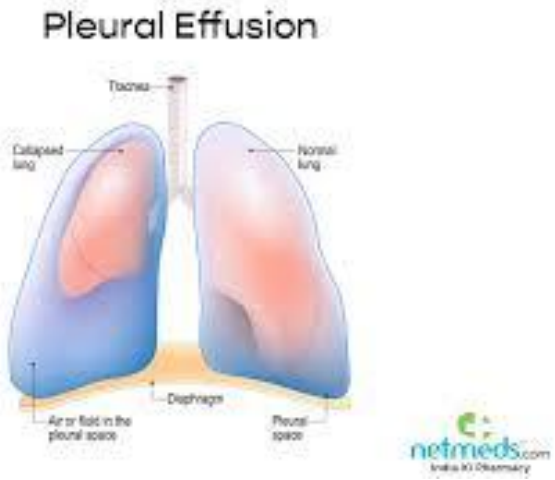


Case 1: Pleural catheter - Troubleshooting

What to do if the catheter is leaking:

- Usually either too much fluid, or a blocked catheter

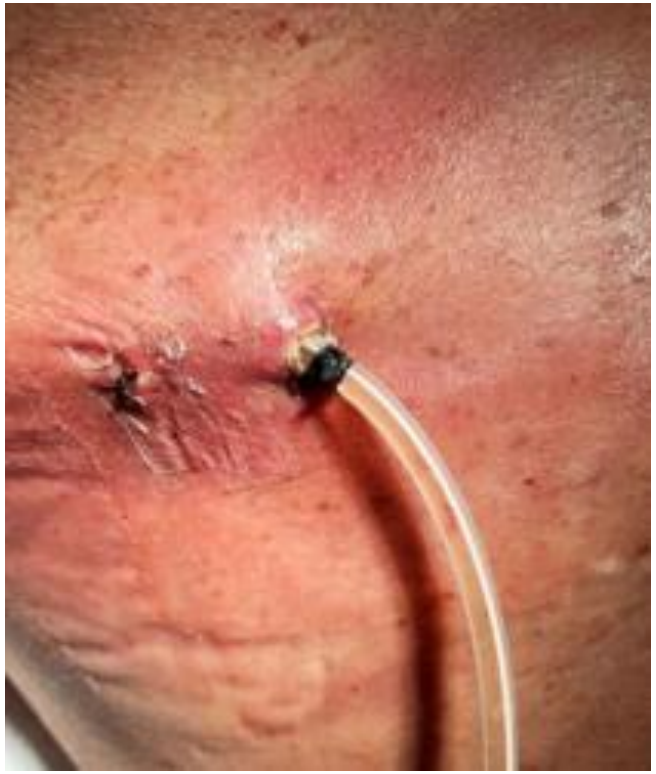
1. Attempt to drain – if catheter blocked, troubleshoot as per previous slide
2. Drain up to 1.5 L (or until the patient has symptoms – pain/cough) – if still leaking, speak to the medical team to increase the amount of drainage days (up to daily) until the amount drained is less than 1.5L



Case 1: Pleural catheter - Troubleshooting

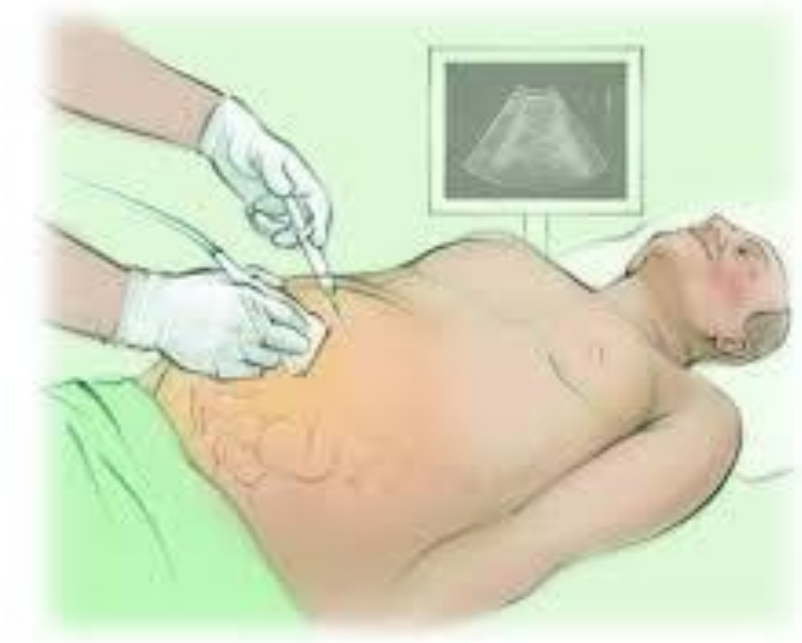
What to do if you suspect an infection:

- Symptoms:
  - Fever
  - Sweating
  - Redness/heat/pain around catheter site
  - Purulent or yellow/green drainage from the catheter
- Liaise with colleagues
  - More frequent dressing changes
  - Topical antibiotics
  - Oral/IV antibiotics
  - Tube removal

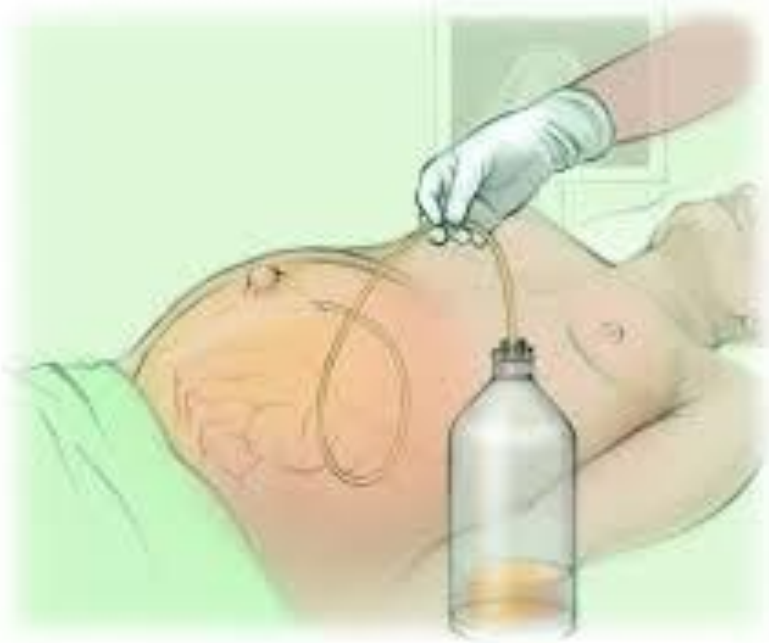


Case 1a: Intra-abdominal drainage for ascites

Paracentesis



Intra-abdominal catheter



Case 2: “I can’t pee”

Mr. Block is an 88 yr old homebound male with major neurocognitive disorder. You see him monthly and as needed through home visits. On today’s visit, the family notes that he has become more agitated over the last 24 hours and his diapers are dry. They worry he is dehydrated, although report good oral intake.

You examine him and find he is tender in the suprapubic area.

In your experience, what are some causes of urinary retention?

Case 2: Urinary Retention

Consider the cause:

- Obstruction (BPH/constipation/prolapse/mass/blood clot-hematuria)
- Infectious (UTI/prostatitis)
- Medications
- Neurologic
- Iatrogenic

Exam:

- Abdominal assessment
- Consider DRE to assess prostate, pelvic exam to assess for prolapse
- Neurologic exam
- Post void residual

Case 2: Urinary Retention - Foley Catheter

Urinary Retention is a Medical Emergency and contributes to patient symptom burden

Foley catheters are helpful to reduce symptoms and improve quality of life in many patients at the end of life

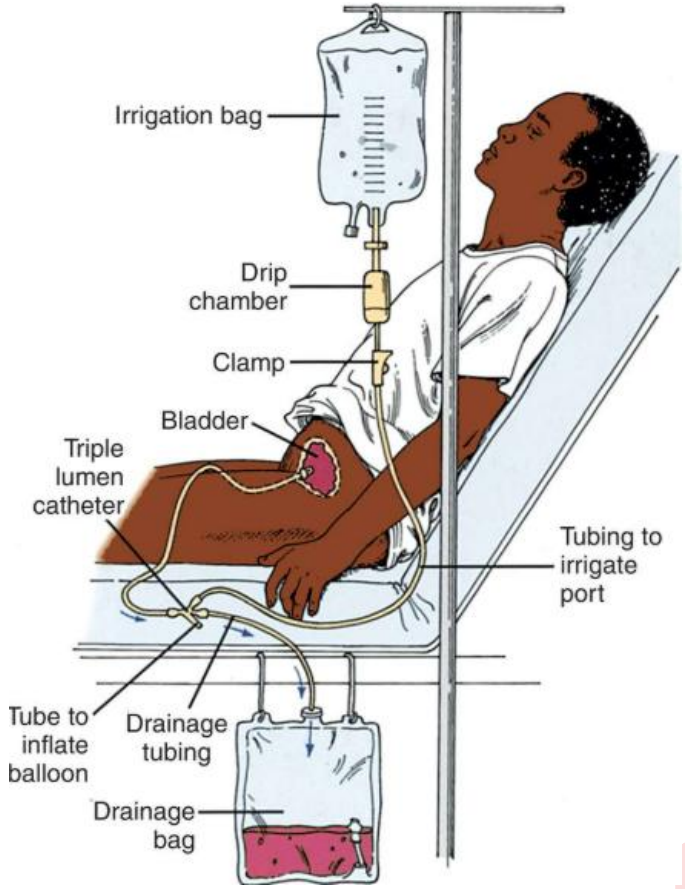
Trouble shooting – what if the catheter is blocked?

- Think about the root cause – consider involving other team members if investigations or treatments needed (e.g. urine sample to r/o UTI, antibiotics, medications for constipation)
- Check the catheter tubing for kinks, check the urine in the tubing and bag
- Check for leakage around catheter
- Consider flushing catheter as per order – generally flush with 60cc of normal saline
- Changing foley catheter if unable to flush

Case 2: Urinary Retention - Foley Catheter

Trouble shooting – what if there is blood in the catheter?

- Can be common after insertion, with infections or malignancy – discuss with medical team if persistent, other symptoms
- Blood clots can obstruct the catheter
  - Attempt troubleshooting in previous slide
  - If large clots, or continues to block, consider continuous bladder irrigation



Case 2: Urinary Retention - Foley Catheter

Trouble shooting – when should I change the catheter?

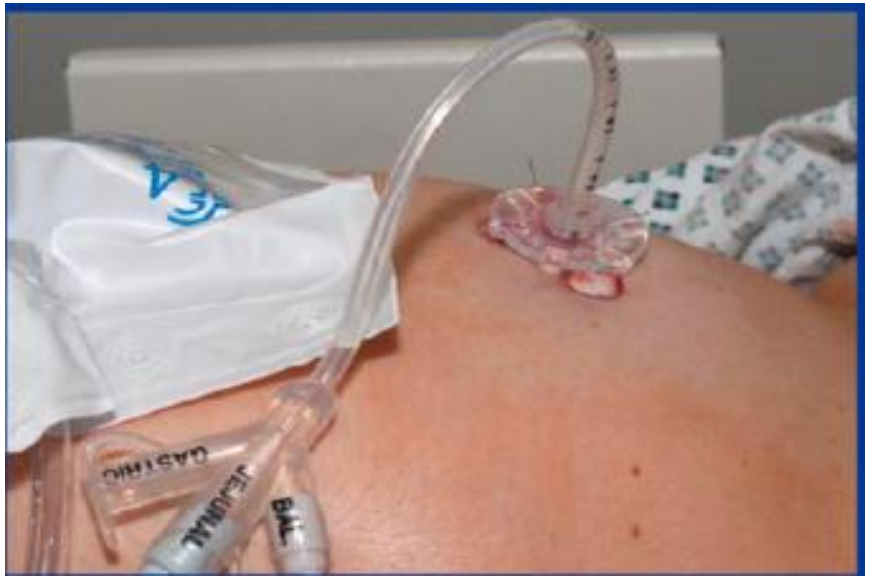
- Catheter changes can be ordered and sometimes is done at routine fixed intervals but is not required; in palliative care patients, change catheters based on clinical indications:
  - Infection
  - Obstruction
  - Tubing/system is compromised/leaking/broken

Case 3: Obstruction

Mrs Bloat is 68 with a history of ovarian cancer and peritoneal carcinomatosis. You meet her after a repeated hospitalization for a bowel obstruction. Her prognosis is poor and she requested to return home to be with her family with the plan to die at home.

On your exam at home, you note the following tube.

She reports she is not receiving any nutrition or medications through the tube.



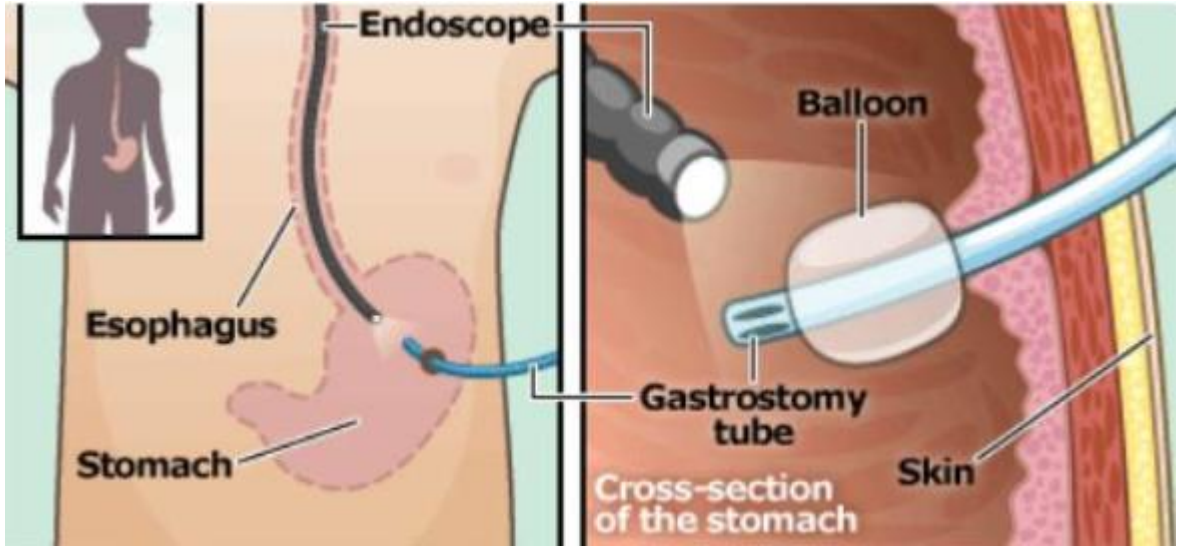
Case 3: Obstruction – vented g-tube

Indications

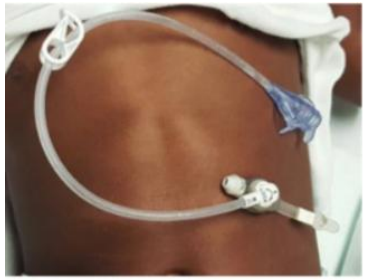
- Bowel obstruction – failed medical/surgical management

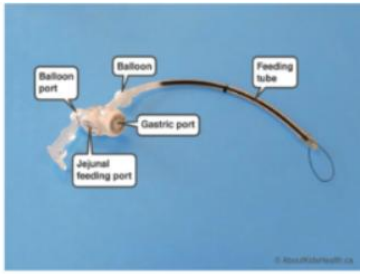
Any g-tube system can be vented

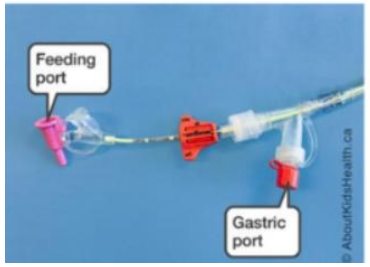
PEG:

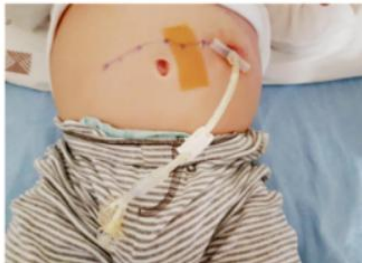


G-tube









Case 3: Obstruction

Benefits?

Palliative Medicine 2002; **16**: 520–526

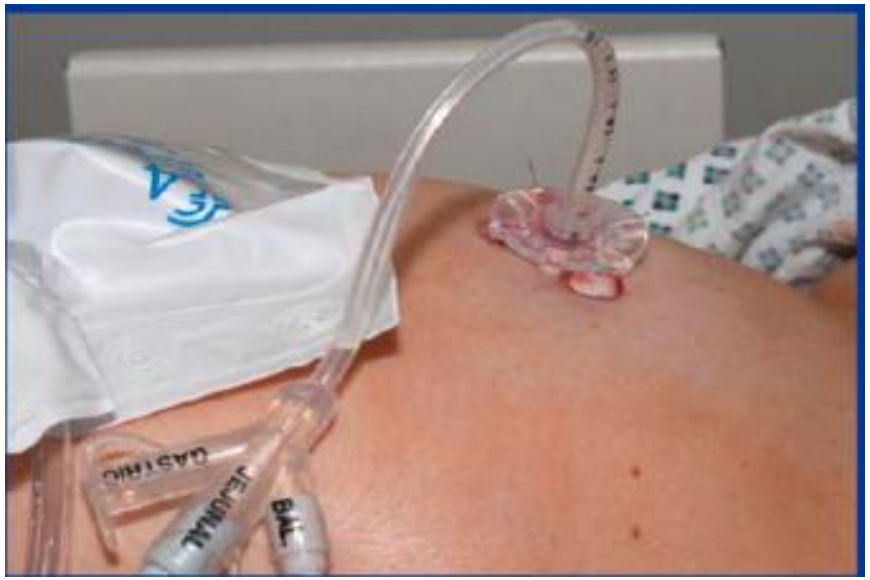
Palliative venting gastrostomy in malignant intestinal obstruction

MA Brooksbank Director of Palliative Care Unit, Royal Adelaide Hospital, Adelaide and Medical Director, Mary Potter Hospice, Calvary Hospital, Adelaide, **PA Game** Senior Staff Specialist, Department of Surgery, University of Adelaide and Royal Adelaide Hospital, Adelaide and **MA Ashby** Head of Palliative Care Unit, Medicine Program, Southern Health, Victoria and Professor of Palliative Medicine, Monash University, Clayton, Victoria

Retrospective study with 51 advanced cancer patients with bowel obstruction presenting with nausea and vomiting (intractable). 92% (41) had their symptoms relieved by venting gastrostomy with median survival of 17 days

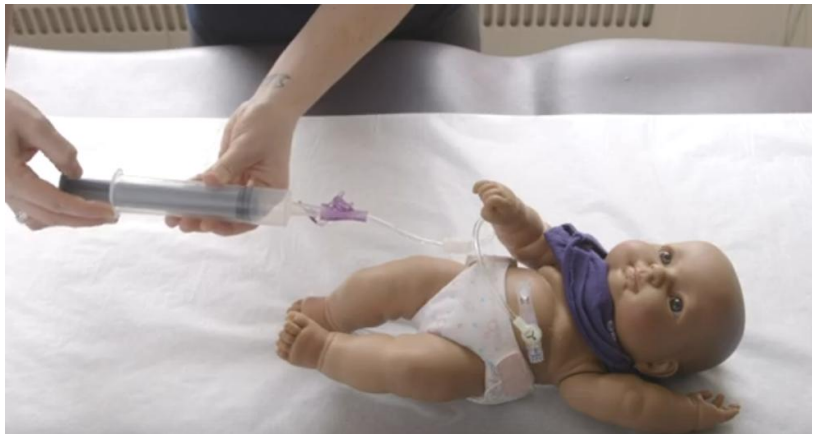
Case 3: Obstruction – how to vent

Only vent the gastric tube, not jejunal



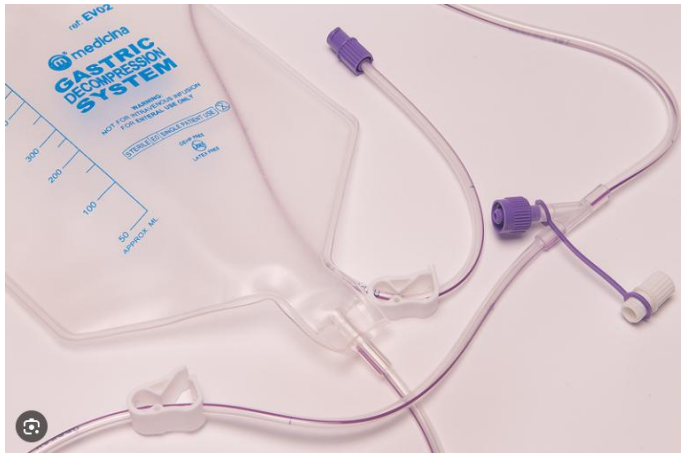
Case 3: Obstruction – how to vent

Manual Venting



1. Wash hands
2. Attach syringe to tube and unclamp
3. Slowly pull back on syringe to remove gas/contents
4. Flush tube with water and clamp tube

Intermittent/continuous bag venting



1. Wash hands
2. Attach bag to tube, ideally place lower than stomach to allow fluids to drain faster
3. Empty bag if ½ full or every 8 hours (engage family or PSW to drain). Nurse to go in q24
4. Flush tube every 24 hours (50 cc of normal saline)
5. Replace bag once a week

Case 3: Obstruction - complications

During insertion

- ~91% successful insertion rate
- 1.9% major complication (sepsis, bleeding, aspiration)

Local/minor complications

- 19.8% minor complications
  - Leakage of fluid from the tub
  - Peristomal/wound infection
  - Minor bleeding
  - Obstruction/blockage of tube
  - Tube dislodgement

Review Paper

Safety and Efficacy of Venting Gastrostomy in Malignant Bowel Obstruction: A Systematic Review

Sreeharshan Thampy, MB BCh B[1], Pavan Najran, MB BChB, FRCR[1], Damian Mullan, MbBChBAO, MFAEM, FRCR FFRRCSI[1], and Hans-Ulrich Laasch, MRCP, FRCR[1]

Journal of Palliative Care
2020, Vol. 35(2) 93-102

DOI: 10.1177/0825859719864915
journals.sagepub.com/home/pal
SAGE

Case 3: Obstruction - Troubleshooting

1. Obstruction – not as common with G-tubes used for feeding
    a) Check to make sue the tube is not kinked and gently massage the tube with your fingers
    b) Consider a 60cc flush with normal saline/water. If blocked, attempt to pull back for 10 seconds and the gently push in (push-pull method)
    c) Consider enzymatic de-clogging agent (if there is access) – e.g. Viokace/baking soda with water
2. Wound infection
    a) Check for symptoms (fever, redness, pain, purulent discharge)
    b) Consider increase dressing changes, topical antibiotics, oral antibiotics
3. Dislodgement
    a) If still draining, let drain
    b) If symptoms worsen, no drain – consider replacing the tube

Case 3: Obstruction

Mrs Bloat returns home and you help to teach and provide equipment for a continuous drainage bag. Her symptoms dramatically improve and she is able to eat food for pleasure.

She is able to stay home and dies peacefully 1 week later

Take home

- Drains/tubes enhance comfort when used appropriately
- Home use feasible with training and monitoring
- Watch for infection, blockage, dislodgement

Questions?

Session Wrap Up

- Please fill out our feedback survey, a link has been added into the chat.
- A recording of this session will be emailed to registrants within the next week.
- Join us for our next session on August 27th, 2025, from 12-1pm ET on **Intimacy and Sexually in Advanced Serious Illness.**

Thank You

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