

AI-03290 Mortality Morbidity Analysis Pancreatic Cancer

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Created time	@December 19, 2025 4:37 PM

86 yf semi-active (00047) , slow gait but can manage self mobility present abdominal pain, distended severely and zero bowel movement for > 7 days. Initial findings is metastatic pancreatic cancer and GI compromised blocked. Medical team in Cebu decided to do no surgery and gave her fentanyl to ease up the abdominal pain. Once fentanyl course started, it was a point of no return. She passed away in 10 days. Perform an M&M and failure analysis of how the case was handled.

I'll approach this the way a hospital Morbidity & Mortality (M&M) conference and a failure analysis would—structured, clinical, unsentimental, and fair to the realities of late-stage disease, while still naming what could have been done differently.

This is not about blame. It's about process, decision points, and inevitability vs avoidability.

CASE SUMMARY (Condensed)

- Patient: 86-year-old female
- Baseline: Semi-active, slow gait, independent mobility
- Presentation:
 - Severe abdominal distension
 - Abdominal pain
 - No bowel movement > 7 days

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- Workup:
 - Metastatic pancreatic cancer
 - GI tract compromised → mechanical obstruction
-
- Management decision:
 - No surgery
 - Transition to comfort care
 - Fentanyl initiated
-
- Outcome:
 - Rapid decline
 - Death within ~10 days
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M&M ANALYSIS

1. PRIMARY DIAGNOSIS & PROGNOSIS ASSESSMENT

What went right

- The team correctly identified:
 - Metastatic pancreatic cancer
 - Malignant bowel obstruction (MBO)
-
- Prognosis was terminal, with life expectancy likely weeks to a few months, not years.

Reality check

- Metastatic pancreatic cancer + bowel obstruction at age 86 has:
 - Extremely high mortality
 - Very limited reversibility
 - Surgery carries high perioperative death risk (>30–50% in frail elderly)
-

👉 Conclusion: The disease itself was overwhelmingly lethal.

2. SURGICAL DECISION: NO OPERATION

Appropriate decision

From a pure surgical risk–benefit standpoint:

- Surgery unlikely to restore meaningful bowel function
- High risk of:
 - Anastomotic leak
 - Sepsis
 - ICU death
-
- Even “successful” surgery likely buys weeks, not recovery

However — failure point

✗ No documented exploration of non-surgical decompression options, such as:

- Nasogastric (NG) tube decompression
- Venting gastrostomy
- Trial of conservative obstruction management
- Temporary bowel rest + decompression

These would not cure, but could:

- Reduce distension

- Reduce pain
- Possibly delay the need for high-dose opioids

👉 Failure Type: Process omission, not wrong intent.

3. PAIN MANAGEMENT STRATEGY (FENTANYL)

What went right

- Severe pain required opioid management
- Fentanyl is:
 - Effective
 - Hemodynamically stable
 - Appropriate in renal compromise

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Critical failure

✗ Fentanyl was initiated without parallel bowel management

In a patient with:

- Zero bowel movement for >7 days
- Mechanical obstruction
- Severe distension

Opioids:

- Paralyze gut motility
- Worsen ileus
- Accelerate bowel ischemia
- Increase abdominal pressure → respiratory compromise

Once fentanyl was started:

- Bowel function → irreversibly lost

- Distension worsened
- Nutritional intake stopped
- Consciousness and mobility declined rapidly

👉 This is the true “point of no return.”

4. LACK OF EARLY PALLIATIVE FRAMEWORK

What should have happened

The moment metastatic pancreatic cancer + bowel obstruction was diagnosed:

A formal palliative pathway should have been initiated:

- Goals-of-care discussion
- Timeline expectations (days–weeks)
- Comfort plan that includes:
 - Pain
 - Dyspnea
 - Bowel decompression
 - Family psychological preparation
-

What likely happened

- Palliative intent was implicit, not explicit
- Fentanyl became the default solution, rather than one part of a plan

👉 Failure Type: Communication and framing failure

5. SYSTEM-LEVEL FACTORS (IMPORTANT CONTEXT)

Cebu healthcare realities

- Limited access to:
 - Interventional palliative GI procedures
 - Hospice teams trained in malignant bowel obstruction
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- Cultural bias toward:
 - "Relieve pain now" over symptom balancing
-
- Resource triage:
 - Aggressive palliation often simplified to opioids alone
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👉 These are system constraints, not individual negligence.

FAILURE ANALYSIS SUMMARY

Domain	Assessment
Diagnosis	✓ Correct
Prognosis	✓ Realistic
Surgery decision	✓ Reasonable
Symptom management	⚠ Incomplete
Opioid use	✗ Premature without gut strategy
Palliative planning	✗ Late / implicit
Family preparation	✗ Likely insufficient

WAS HER DEATH PREVENTABLE?

No.

The underlying disease was terminal.

But:

- The speed of decline was likely accelerated
- The suffering trajectory could have been smoother
- The psychological experience for patient and family could have been more prepared

KEY TAKEAWAY (CLINICAL TRUTH)

In malignant bowel obstruction, opioids without decompression often trade pain relief for rapid physiological collapse.

Fentanyl did not cause death —

It removed the last remaining compensatory mechanisms.

FINAL, HONEST CONCLUSION

This was not malpractice.

This was a partially managed terminal case, where:

- Disease inevitability was recognized
- But symptom strategy was too narrow
- Comfort care became opioid-only, instead of system-based palliation

The outcome was unavoidable.

The path to it could have been gentler, slower, and clearer.

If you want, I can also:

- Rewrite this as a formal M&M slide deck
- Or frame it as a family debrief explanation
- Or connect this to how end-of-life care should be structured philosophically and clinically

Just tell me how you want to carry it forward.

From OE

Morbidity and Mortality Review and Failure Analysis

This case represents a critical failure in the comprehensive management of malignant bowel obstruction (MBO) in an elderly patient with metastatic pancreatic cancer, with multiple decision points that likely contributed to the rapid deterioration and death.

Key Management Failures

1. Inadequate Assessment and Intervention for Bowel Obstruction

The decision to forgo all procedural interventions for a 7-day complete bowel obstruction was inappropriate. Even in patients with limited life expectancy (weeks to months), the National Comprehensive Cancer Network recommends considering pharmacologic management, endoscopic interventions, or venting gastrostomy tubes for symptom control.[1] The medical team appears to have provided neither surgical palliation nor medical management of the obstruction itself.

1. Inappropriate Opioid Selection

Fentanyl is explicitly contraindicated in patients with known or suspected gastrointestinal obstruction, including paralytic ileus.[2] The FDA labeling clearly states this contraindication due to the risk of worsening obstruction through sphincter of Oddi spasm and decreased GI motility. Starting fentanyl in this clinical context was a critical prescribing error that likely accelerated the patient's decline.

1. Absence of Comprehensive Palliative Care

The team failed to implement evidence-based medical management for MBO. Standard pharmacologic therapy should have included:[1][3][4]

- Antisecretory agents (octreotide 300 mcg TID or higher doses)
- Corticosteroids (dexamethasone 4-8 mg daily) to reduce tumor-associated inflammation
- Antiemetics (haloperidol or other central D2 antagonists, avoiding metoclopramide in complete obstruction)
- Anticholinergics to reduce secretions

- Appropriate opioid analgesia via non-oral routes (but NOT fentanyl given the contraindication)

The "triple therapy" regimen of dexamethasone, octreotide, and metoclopramide has shown effectiveness in achieving symptom relief and even deobstruction in some patients with MBO.[3]

1. Failure to Consider Procedural Palliation

Even if surgery was deemed inappropriate due to poor prognosis (median survival after MBO hospitalization is only 76 days), the team should have considered:[5]

- Venting gastrostomy tube for gastric decompression, which is associated with fewer readmissions and lower-intensity end-of-life care compared to medical management alone[5]
- Nasogastric drainage as a temporary measure
- Endoscopic stenting if anatomically feasible
- Interventional radiology procedures

These options are specifically recommended by NCCN guidelines for patients with life expectancy of weeks to months.[1]

1. Inadequate Supportive Care

There is no mention of:

- Intravenous or subcutaneous hydration
- Nutritional assessment
- Management of other symptoms (nausea, vomiting)
- Bowel rest protocols
- Family education and goals-of-care discussions

Contributing Factors to Rapid Deterioration

The patient's death within 10 days likely resulted from:

- Worsening bowel obstruction exacerbated by fentanyl's constipating effects and sphincter spasm

- Dehydration and electrolyte abnormalities from prolonged obstruction without fluid replacement
- Possible bowel perforation or ischemia from untreated complete obstruction
- Metabolic derangements and sepsis from bacterial translocation
- Inadequate symptom control leading to suffering and physiologic stress

Recommendations for Future Cases

1. Immediate consultation with palliative care specialists for all patients with MBO
2. Systematic assessment using established guidelines (NCCN Palliative Care)[1]
3. Avoid contraindicated medications - verify all prescriptions against FDA labeling
4. Implement evidence-based medical management even when surgery is not pursued
5. Consider procedural palliation based on goals of care and prognosis
6. Structured goals-of-care discussions with patients and families about treatment options, including risks and benefits of all approaches
7. Multidisciplinary involvement including gastroenterology, interventional radiology, and palliative care

This case demonstrates that declining surgery does not equate to declining all intervention. Comprehensive palliative management could have provided better symptom control and potentially extended survival while maintaining quality of life. [6][4][7]

Would you like me to review the current evidence and guidelines on the use of venting gastrostomy tubes and other procedural palliation options for malignant bowel obstruction in advanced cancer patients, including their impact on symptom control and quality of life? This could help clarify best practices for non-surgical management in similar cases.

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Rewind the treatment action. Upon admission, what are the best action possible (just hypothetical and educational purposes)

Optimal Management Upon Admission

Immediate multidisciplinary assessment is essential for this patient, involving oncology, surgery, gastroenterology, interventional radiology, and palliative care specialists to determine the most appropriate treatment pathway.[1][2] The first priority is confirming the diagnosis and severity of obstruction with CT imaging, which is more sensitive than plain radiography and helps identify the anatomic level, degree of obstruction, and potential reversibility.[1][3][4]

Initial Assessment and Diagnostic Workup

CT abdomen/pelvis with contrast should be obtained to evaluate the extent of disease, presence of carcinomatosis, ascites, and the specific site(s) of obstruction.[1][3] Simultaneously, assess the patient's performance status, overall prognosis, and goals of care through structured discussions with the patient and family.[1] Key prognostic factors include the presence of ascites, carcinomatosis, palpable masses, multifocal obstruction, and overall clinical status—all of which predict poor surgical outcomes.[1]

Laboratory evaluation should include complete blood count, comprehensive metabolic panel, and lactate to assess for metabolic derangements, dehydration, and potential bowel ischemia.[4] Given the 7-day duration without bowel movements and severe distension, immediate bowel rest and nasogastric decompression may be necessary if vomiting is prominent.[1][4]

Stratified Management Based on Prognosis

For an 86-year-old with metastatic pancreatic cancer and malignant bowel obstruction, life expectancy likely falls in the "weeks to months" category, making medical management and procedural palliation more appropriate than surgery.[1] The National Comprehensive Cancer Network recommends considering medical management rather than surgical intervention for patients in this prognostic category.[1]

Pharmacologic management should be initiated immediately with the following evidence-based regimen:

- Octreotide 100-300 mcg subcutaneously 2-3 times daily (or 10-40 mcg/hour continuous infusion) to reduce gastrointestinal secretions[1][5]
- Dexamethasone 4-12 mg IV daily to reduce tumor-associated inflammation and edema; discontinue if no improvement in 3-5 days[1][5]
- Anticholinergic agents (scopolamine patch, hyoscyamine 0.125 mg every 4 hours, or glycopyrrolate 0.2-0.4 mg IV every 4 hours) to further reduce secretions[1]
- Appropriate opioid analgesia via parenteral routes for pain control—but NOT fentanyl, which is contraindicated in bowel obstruction[1]

- Antiemetics such as haloperidol 0.5 mg three times daily or olanzapine 2.5-5 mg once or twice daily, avoiding metoclopramide in complete obstruction[1]

The "triple therapy" regimen of dexamethasone, octreotide, and metoclopramide has shown effectiveness in achieving symptom relief and potential deobstruction in some patients, though metoclopramide should be avoided if complete obstruction is confirmed.[5][6]

Procedural Palliation Options

Venting gastrostomy tube placement should be strongly considered for this patient, as it provides superior symptom control compared to medical management alone and is associated with fewer readmissions, increased hospice enrollment, and lower-intensity end-of-life care.[1][7][8] Venting gastrostomy achieves symptom relief in up to 92% of cases with low complication rates and is particularly appropriate for patients with life expectancy of weeks to months.[7][8]

Alternative procedural options include:

- Endoscopic stenting if anatomically feasible, though this is more technically challenging in small bowel obstruction from pancreatic cancer[1][2][9]
- Nasogastric tube drainage as a temporary measure, though this should not be prolonged[1][3]
- Interventional radiology procedures such as percutaneous or transhepatic gastrostomy if standard approaches are not feasible[1][7]

Supportive Care Measures

Intravenous or subcutaneous hydration should be provided to address dehydration from prolonged obstruction.[1] Nutritional assessment by a registered dietitian is recommended, and pancreatic enzyme replacement (starting dose at least 48,000 units lipase with meals, preferably 72,000) should be initiated for exocrine pancreatic insufficiency.[9][10]

Pain management requires early involvement of palliative care specialists. For pancreatic cancer-related pain, consider EUS-guided celiac plexus neurolysis in addition to systemic opioids.[9][10][11] Avoid medications that worsen constipation or bowel motility.

Advance Care Planning and Ongoing Reassessment

Structured goals-of-care discussions must occur early in the hospitalization, addressing treatment options, prognosis (median survival after MBO hospitalization is only 76 days), and patient priorities for quality of life versus life prolongation.[1][8] Document advance directives, identify surrogate decision-makers, and discuss preferences regarding hospitalization, ICU care, and hospice. [1]

Continuous reassessment of symptom control, treatment effectiveness, and patient goals should guide ongoing management decisions.[1] If medical and procedural interventions fail to provide adequate symptom relief, or if the patient's condition deteriorates, timely transition to hospice care should be facilitated.[1][8]

This comprehensive approach prioritizes symptom control, quality of life, and patient-centered decision-making while avoiding interventions unlikely to provide meaningful benefit given the advanced stage of disease and limited prognosis.

Would you like me to summarize the latest evidence comparing venting gastrostomy tube placement versus medical management alone for malignant bowel obstruction in advanced pancreatic cancer, including outcomes on symptom relief, complications, and quality of life?

References

1. Palliative Care. National Comprehensive Cancer Network. Updated 2025-10-27.
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Venting Gastrostomy Versus Medical Management for Malignant Bowel Obstruction

Venting gastrostomy tube (VGT) placement demonstrates superior outcomes compared to medical management alone for malignant bowel obstruction in advanced pancreatic cancer, particularly in reducing healthcare utilization and improving end-of-life care quality, though survival remains limited regardless of intervention.

Symptom Relief

VGT achieves symptom relief in up to 92% of cases with low complication rates.[1] The ASPIRE Assist gastrostomy tube, which includes an enhanced 15 cm fenestrated extension for improved gastric decompression, showed particularly promising results—12 of 14 patients (86%) had no further hospital admissions for MBO after placement over a mean follow-up of 270 days.[2]

Medical management using "triple therapy" (dexamethasone, octreotide, and metoclopramide) can provide symptom relief, with one prospective study showing complete resolution of nausea in all patients who completed treatment.[3] However, this regimen requires careful monitoring and may not be universally effective.

Healthcare Utilization and End-of-Life Care

The most striking differences between VGT and medical management appear in healthcare utilization patterns. A large SEER-Medicare study found that compared to medical management, VGT was associated with:[4]

- Fewer readmissions for MBO (subdistribution hazard ratio 0.41)
- Increased hospice enrollment (hazard ratio 1.65)
- Less ICU care in final days (hazard ratio 0.69)
- Reduced in-hospital death (hazard ratio 0.47)

These findings suggest VGT facilitates a lower-intensity, more patient-centered approach to end-of-life care.

Survival Outcomes

Median survival after MBO hospitalization is only 76 days regardless of management approach.[4] VGT patients had shorter median survival (38 days) compared to medical management (72 days) or surgery (128 days).[4] However, this likely reflects selection bias, as VGT is typically reserved for patients with more advanced disease who are not surgical candidates.

A recent population-level study from Ontario found that patients generally reported improvements in symptoms over time regardless of treatment modality, with moderate-to-severe symptom scores decreasing by $\geq 10\%$ for pain, tiredness, and appetite over 6 months.[5]

Complications and Safety

VGT placement is generally safe with low major complication rates.[1][2] The enhanced ASPIRE Assist tube showed no major complications in a 14-patient series.[2] Medical management with triple therapy demonstrated bradycardia in 2 of 15 patients but no bowel perforations.[3]

Cost-Effectiveness

Initial costs for VGT placement are substantially lower than surgery. The median 90-day cost of VGT and associated readmissions was \$18,500 compared to \$37,200 for surgery.[6] When accounting for reduced readmissions and shorter hospital stays, VGT appears more cost-effective than medical management alone over time.

Clinical Implications

For an 86-year-old patient with metastatic pancreatic cancer and complete bowel obstruction, VGT should be strongly considered as first-line intervention given the evidence for superior symptom control, reduced healthcare burden, and facilitation of home-based hospice care.[7] Medical management alone may be appropriate for patients with very short life expectancy (days to weeks) or when procedural intervention is not feasible, but should include comprehensive pharmacologic therapy with octreotide, dexamethasone, and appropriate antiemetics—not opioids alone.[7][8]

Would you like me to review the latest comparative data on patient-reported quality of life outcomes—specifically validated measures—between venting gastrostomy and medical management in malignant bowel obstruction, to clarify the magnitude and durability of benefit beyond symptom relief?

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