**Patient**: Harold Jenkins  
**MRN**: 629541  
**DOB**: 1956-11-24 (68 years)  
**Admission**: 2025-03-22 | **Discharge**: 2025-03-30  
**Physicians**: Dr. N. Rivera (Gastroenterology), Dr. S. Chen (Medical Oncology), Dr. J. Wilson (Interventional Radiology)

**DISCHARGE DIAGNOSIS**

Locally Advanced Pancreatic Ductal Adenocarcinoma with Acute Cholangitis Secondary to Biliary Obstruction

**DETAILED DIAGNOSIS**

* **Primary**: Pancreatic Ductal Adenocarcinoma (PDAC), Locally Advanced
* **Diagnosed**: 2025-02-10
* **Location**: Head of pancreas
* **Clinical stage**: T4N1M0 (AJCC 8th Edition, Stage III). Unresectable due to vascular encasement
* **Pathology** (EUS-guided fine needle biopsy, 2025-02-10):
  + Moderately differentiated pancreatic ductal adenocarcinoma
  + IHC: CK7+, CK20-, CA19-9+, CDX2-, MUC1+
  + NGS: KRAS G12D mutation, CDKN2A loss, TP53 mutation
* **Staging**:
  + Primary tumor: 3.6 × 3.2 cm mass in the pancreatic head encasing the superior mesenteric artery (>180°)
  + Regional lymph nodes: Enlarged peripancreatic lymph nodes (largest 1.5 cm)
  + Distant metastases: None identified

**CURRENT TREATMENT**

**Biliary Obstruction and Cholangitis**:

* Onset: Progressive jaundice ~10 days prior to admission
* Acute cholangitis diagnosed based on:
  + Fever (39.1°C)
  + Leukocytosis (WBC 18.6 × 10^9/L)
  + Hyperbilirubinemia (total bilirubin 12.4 mg/dL)
  + Elevated liver enzymes (AST 285 U/L, ALT 310 U/L, ALP 780 U/L)
  + Dilated bile ducts (common bile duct 14 mm)
  + Blood cultures positive for Escherichia coli

**Current Imaging**:

* CT abdomen/pelvis (2025-03-22): 3.6 × 3.2 cm pancreatic head mass encasing the superior mesenteric artery (>180°) and abutting the portal vein, moderate biliary ductal dilation
* MRCP (2025-03-23): Confirms biliary obstruction at pancreatic head with upstream dilation

**Tumor Markers**:

* CA 19-9: 2,450 U/mL (Reference: <37)
* CEA: 15.8 ng/mL (Reference: <5.0)

**Management of Acute Cholangitis**:

* Antibiotics:
  + Piperacillin-tazobactam 4.5 g IV every 6 hours for 7 days
  + Transitioned to oral ciprofloxacin 500 mg PO twice daily for 3 additional days
* Biliary decompression:
  + ERCP with placement of covered metal biliary stent (10 mm × 8 cm) on 2025-03-24
  + Bile duct brushings obtained (cytology negative for malignancy)

**PREVIOUS TREATMENT HISTORY**

**Previous Cancer-Directed Therapy**:

* Neoadjuvant chemotherapy initiated on 2025-03-09
* Regimen: FOLFIRINOX
* Completed one cycle with reasonable tolerance (Grade 2 neutropenia, Grade 1 peripheral neuropathy, Grade 2 nausea)

**Previous Procedures**:

* ERCP with plastic biliary stent placement (2025-01-25)
* EUS-guided FNA of pancreatic mass (2025-02-10)

**COMORBIDITIES**

* Rheumatoid arthritis (diagnosed 2010, managed with DMARDs)
* COPD (GOLD Stage 2, 40 pack-year smoking history, quit 2015)
* Atrial fibrillation (paroxysmal, on anticoagulation)
* Coronary artery disease (NSTEMI 2018, medical management)
* Chronic kidney disease stage G3a (baseline eGFR 50-55 mL/min/1.73m²)
* Diabetes mellitus type 2 (diagnosed 2025-01, likely secondary to pancreatic disease)
* Depression

**HOSPITAL COURSE**

68-year-old male with recently diagnosed locally advanced pancreatic adenocarcinoma presented with fever, worsening jaundice, and right upper quadrant pain consistent with acute cholangitis secondary to biliary obstruction.

On admission: febrile (39.1°C), tachycardic, and jaundiced with leukocytosis, elevated bilirubin, and liver enzymes. Blood cultures grew Escherichia coli.

Treatment included intravenous piperacillin-tazobactam. Urgent ERCP performed on 2025-03-24 revealed an occluded plastic stent, which was removed and replaced with a covered metal biliary stent, resulting in good drainage.

Clinical status improved significantly with fever resolution within 48 hours and gradual decrease in bilirubin levels. IV antibiotics for 7 days, then oral ciprofloxacin for an additional 3 days. WBC normalized and repeat cultures were negative.

FOLFIRINOX chemotherapy (planned second cycle 2025-03-23) held due to infection. Oncology recommended resuming chemotherapy 2 weeks after discharge.

Hospital course complicated by:

1. Atrial fibrillation with RVR (managed with metoprolol)
2. Hyperglycemia requiring insulin (exacerbated by infection/steroids)
3. Acute kidney injury (peak creatinine 1.8 mg/dL, improved to 1.3 mg/dL at discharge)

**DISCHARGE MEDICATIONS**

* Ciprofloxacin 500 mg PO twice daily for 3 more days
* Oxycodone 5-10 mg PO every 6 hours PRN moderate-severe pain
* Acetaminophen 650 mg PO every 6 hours PRN mild pain/fever
* Ondansetron 8 mg PO every 8 hours PRN nausea
* Metoprolol tartrate 50 mg PO twice daily
* Apixaban 5 mg PO twice daily
* Prednisone 5 mg PO daily
* Clopidogrel 75 mg PO daily
* Tiotropium inhaler 2 puffs daily
* Albuterol inhaler 2 puffs every 4-6 hours PRN wheezing
* Insulin glargine 20 units SubQ at bedtime
* Insulin lispro sliding scale SubQ with meals
* Metformin 500 mg PO twice daily
* Sertraline 50 mg PO daily
* Pantoprazole 40 mg PO daily
* Creon 24,000 unit capsules: 2 capsules PO with main meals, 1 capsule with snacks

**FOLLOW-UP PLAN**

**Gastroenterology**:

* Dr. N. Rivera in 2 weeks (2025-04-13)
* Labs (CBC, CMP, lipase, amylase, PT/INR) prior to appointment
* Discuss stent removal/exchange in 3-6 months
* RUQ ultrasound in 4 weeks to confirm resolution of biliary dilation

**Medical Oncology**:

* Dr. S. Chen in 2 weeks (2025-04-13)
* Labs including tumor markers (CA 19-9, CEA) prior to appointment
* Resume FOLFIRINOX (cycle 2) tentatively on 2025-04-15 with G-CSF support
* Discuss maintenance therapy options based on response

**Imaging**:

* Restaging CT chest/abdomen/pelvis with pancreatic protocol (2025-04-30)
* Evaluate tumor response and vascular involvement

**Primary Care**:

* Dr. T. Williams in 3 weeks (2025-04-20)
* Monitor comorbidities, especially renal function

**Additional Services**:

* Nutrition consultation for enzyme replacement and dietary recommendations
* Social work referral for psychosocial support
* Palliative care consultation (2025-04-15) for symptom management

**Patient Education**:

* Signs of recurrent biliary obstruction (fever, jaundice, RUQ pain)
* Medication adherence and follow-up importance
* Diabetes management with glucose monitoring

**KEY LAB VALUES**

|  |  |  |  |
| --- | --- | --- | --- |
| **Parameter** | **Admission** | **Discharge** | **Reference** |
| WBC | 18.6 | 8.4 | 4.0-11.0 ×10^9/L |
| Hemoglobin | 10.2 | 10.5 | 13.5-17.5 g/dL |
| Total Bilirubin | 12.4 | 4.2 | 0.1-1.2 mg/dL |
| Direct Bilirubin | 9.6 | 3.1 | 0.0-0.3 mg/dL |
| AST | 285 | 85 | 10-40 U/L |
| ALT | 310 | 95 | 10-55 U/L |
| Alkaline Phosphatase | 780 | 320 | 35-105 U/L |
| Creatinine | 1.8 | 1.3 | 0.7-1.2 mg/dL |
| eGFR | 37 | 53 | >60 mL/min/1.73m² |
| Glucose | 238 | 156 | 70-99 mg/dL |
| CA 19-9 | 2,450 | - | <37 U/mL |
| CRP | 15.6 | 3.2 | <0.5 mg/dL |
| INR | 1.4 | 1.2 | 0.8-1.2 |

**Blood Cultures**:

* Admission (2025-03-22): Positive for E. coli, sensitive to piperacillin-tazobactam, ciprofloxacin
* Repeat (2025-03-26): No growth after 5 days

**Electronically Signed**:  
Dr. N. Rivera (Gastroenterology)  
Dr. S. Chen (Medical Oncology)  
Dr. J. Wilson (Interventional Radiology)  
Date: 2025-03-30