Patient: Michael Bellwether
Medical Record Number: SYN175
Date of Birth: 1957-03-23

Admission Date: 2022-11-05
Discharge Date: 2022-11-12
Discharge Disposition: Home with Hospice Care

Admitting Diagnoses:

1. Worsening Jaundice and Liver Dysfunction secondary to Progressive Metastatic NSCLC.
2. Malignant Ascites.
3. Decompensated Liver Disease.
4. Cachexia and Deconditioning.

Discharge Diagnoses:

1. End-Stage Metastatic Non-Small Cell Lung Cancer (Adenocarcinoma), Wild Type, PD-L1 TPS 20%. Extensive hepatic metastases. Status post first-line chemo-immunotherapy and brief second-line chemotherapy.
2. Severe Hepatic Dysfunction secondary to tumor infiltration.
3. Malignant Ascites.
4. Cancer Cachexia.
5. Coronary Artery Disease (History of MI 2010, s/p stent).
6. Chronic Kidney Disease Stage IIIa (baseline Cr ~1.4-1.6).
7. Hypertension.

Oncologic History:
Mr. Bellwether was a 66-year-old male diagnosed with Stage IV NSCLC Adenocarcinoma on 2020-07-17 after presenting with fatigue and elevated liver enzymes. Staging PET/CT revealed a right lower lobe primary tumor with extensive hepatic metastases and mediastinal lymphadenopathy. Molecular testing was negative for targetable driver mutations (EGFR, ALK, ROS1, BRAF, etc. wild-type). PD-L1 TPS was 20%.

He initiated first-line therapy with Carboplatin (AUC 5), Pemetrexed (500 mg/m^2), and Pembrolizumab (200 mg) starting 2020-08-07. He completed 4 cycles of induction followed by Pemetrexed/Pembrolizumab maintenance. Initial scans showed a partial response with reduction in liver lesion size and normalization of LFTs. This response was maintained for approximately 12 months.

In August 2021, surveillance imaging showed clear progression in the liver metastases, with appearance of new lesions and growth of existing ones. Ascites developed shortly thereafter. LFTs began to rise. He was started on second-line Docetaxel (initially 75 mg/m^2, reduced to 60 mg/m^2 due to fatigue and neutropenia) in September 2021. He received only 3 cycles, demonstrating minimal clinical benefit and continued radiographic progression in

the liver. Treatment was complicated by worsening fatigue, anorexia, and further decline in liver function. Chemotherapy was discontinued in late October 2021 due to toxicity and lack of efficacy.

Over the past month leading up to admission, he developed progressive jaundice, pruritus, worsening abdominal distension from ascites, profound fatigue, and significant weight loss (ECOG performance status deteriorated to 4).

Hospital Course:
Patient admitted for management of decompensated liver function and worsening symptoms.

- **Labs on Admission:**
    - WBC 7.1, Hgb 8.9, Plt 110
    - Na 132, K 4.5, BUN 45, Cr 1.8 mg/dL
    - AST 250 U/L, ALT 180 U/L, Alk Phos 1100 U/L, Total Bilirubin 15.5 mg/dL (Direct 10.8 mg/dL)
    - Albumin 2.1 g/dL
    - INR 1.6
    - CEA > 500 ng/mL
- **Imaging:** Abdominal Ultrasound (2022-11-06) confirmed extensive hypoechoic lesions throughout the liver, consistent with known metastases, markedly increased compared to prior CT from August 2021. Moderate-to-large volume ascites. Patent portal vein. No biliary ductal dilation.
- **Management:**
    - **Ascites:** Therapeutic paracentesis performed on 2022-11-06, removed 4.5 Liters of serosanguinous fluid. Cytology confirmed malignant cells consistent with adenocarcinoma. Provided significant symptomatic relief of abdominal pressure. Diuretics (Spironolactone/Furosemide) were considered but held due to borderline hypotension and renal function.
    - **Liver Dysfunction:** Managed supportively. Vitamin K administered for coagulopathy. Lactulose initiated for possible subclinical hepatic encephalopathy (though patient remained oriented). Pruritus managed with Cholestyramine and Hydroxyzine with partial effect.
    - **Nutrition/Hydration:** Maintained IV fluids cautiously due to ascites and CKD. Encouraged PO intake but patient had poor appetite. Nutritional supplements provided.
    - **Pain/Symptoms:** Managed with low-dose opioids (Oxycodone) and anti-emetics as needed.
    - **Goals of Care:** Extensive discussions held with Mr. Bellwether and his wife. Given the irreversible liver failure due to tumor burden, lack of further anti-cancer treatment options, and poor prognosis, the patient requested transition to comfort care and discharge home with hospice support.

Pathology: Liver Biopsy (July 2020): Metastatic Adenocarcinoma, consistent with lung primary (TTF-1+). Molecular: WT for tested drivers. PD-L1 (22C3): TPS = 20%.

Discharge Condition: Serious/Guarded. Patient is alert and oriented, but jaundiced, cachectic, and extremely fatigued. Abdomen soft, non-tender, mild residual distension. Tolerating minimal PO intake. Vital signs stable on minimal support.

Patient died one day after discharge, on 2022-11-13 at home.

Attending Physician:

Dr. Samuel Green, MD
Date: 2022-11-13