**Patient**: R.H. (DOB 1956-02-15)  
**MRN**: 359872  
**Admission**: 2024-03-25 | **Discharge**: 2024-03-29  
**Physicians**: Dr. V. Rodriguez (Medical Oncology), Dr. K. Thompson (Pulmonology), Dr. B. Isaacs (Radiation Oncology)

**DISCHARGE DIAGNOSIS**

Extensive-Stage Small Cell Lung Cancer (ES-SCLC), Recurrent Disease, Status-Post Cycle 2 of Second-Line Topotecan

**ONCOLOGICAL DIAGNOSIS**

* **Primary**: Small Cell Lung Cancer (SCLC), Extensive-Stage
* **Diagnosed**: August 15, 2023 (bronchoscopic biopsy)
* **Histology**: Small cell carcinoma with neuroendocrine morphology
  + IHC: Positive for synaptophysin, chromogranin A, CD56, TTF-1; Ki-67 >80%
* **Molecular**: TP53 mutation (p.R175H), RB1 deletion; PD-L1 5%
* **Initial Staging**: cT4N2M1c, Stage IV (Extensive-Stage)
  + Primary: 4.8 cm RUL mass with mediastinal extension
  + Metastases: Bilateral pulmonary nodules, mediastinal/hilar lymphadenopathy, liver (segments II, V, VII), bone (T4, T10, left iliac)
* **Initial Imaging**:
  + CT: 4.8 cm RUL mass, multiple nodules, lymphadenopathy, hepatic lesions
  + PET: Hypermetabolic primary (SUV 15.2), nodes (SUV 10.5), liver (SUV 9.4-11.2), bone (SUV 7.2-9.8)
  + Brain MRI: Negative
* **Current Disease Status**: Recurrent/progressive disease following first-line treatment with liver metastases showing 15% increase in size on most recent imaging (Jan 2024) compared to nadir, and new small pulmonary nodules in left lower lobe

**CURRENT TREATMENT**

**Regimen**: Single-agent Topotecan (second-line)

* Topotecan 1.5 mg/m² IV on Days 1-5 of 21-day cycle
* Current: Cycle 2 (completed March 25-29, 2024)
* **Dose**: Restored to full dose (1.5 mg/m²) after cycle 1 reduction (1.25 mg/m²)
* **Supportive Care**:
  + Ondansetron 8 mg IV pre-dose, then 8 mg PO Q8H for 24h
  + Dexamethasone 8 mg IV Day 1
  + Filgrastim 480 mcg SC daily starting Day 6 (Mar 30) for 5-7 days
  + IV hydration with NS at 100 ml/hr during treatment

**TREATMENT HISTORY**

**First-Line** (September 2023 - January 2024):

* Carboplatin AUC 5 IV D1 + Etoposide 100 mg/m² IV D1-3 + Atezolizumab 1200 mg IV D1
* 4 cycles chemo + immunotherapy, then 2 cycles maintenance Atezolizumab
* Best response: Partial (45% reduction)
* PFS: 4.5 months
* Progression: January 15, 2024

**Second-Line**:

* Topotecan monotherapy
  + Cycle 1: March 4-8, 2024 (1.25 mg/m²)
  + Cycle 2: Current admission (1.5 mg/m²)
* Complications from Cycle 1: Grade 2 neutropenia, Grade 1 anemia

**Radiation**:

* Palliative to T10: 20 Gy in 5 fractions (December 2023)

**COMORBIDITIES**

* COPD (GOLD Stage 2, 2016)
* Smoking history: 40 pack-years (quit 8/2023)
* Hypertension (2017, controlled)
* Paroxysmal Atrial Fibrillation (2020, on apixaban)
* History of PE (2021)
* CKD Stage 3a (eGFR 50-55 mL/min)
* GERD with Barrett's Esophagus (2019)
* Major Depressive Disorder (managed with sertraline)
* Hypothyroidism (on levothyroxine)
* Bilateral Sensorineural Hearing Loss
* Alcohol Use Disorder (in remission since 2018)

**HOSPITAL COURSE**

68-year-old male with ES-SCLC received cycle 2 of topotecan at full dose (1.5 mg/m²) from March 25-29. Tolerated therapy with Grade 1 nausea controlled with antiemetics. Experienced progressive fatigue but remained ambulatory. No mucositis or diarrhea observed.

Baseline anemia (Hgb 10.5 g/dL) with adequate WBC and platelets. Liver and kidney function remained stable. Portable CXR showed stable right pleural effusion with approximately 300cc fluid estimated, not requiring therapeutic thoracentesis at this time per Pulmonology. Oxygen saturation 93-94% without supplementation. Lung exam revealed decreased breath sounds at right base consistent with known effusion and scattered wheezes bilaterally consistent with COPD.

Pain control was well-maintained with home regimen of ER morphine and breakthrough oxycodone, with adequate relief of bone pain from metastases. Performance status remained at ECOG 1-2 throughout admission. Apixaban held 24h prior to PICC placement, then resumed without bleeding complications. Filgrastim prescribed post-discharge to prevent recurrence of grade 2 neutropenia seen after cycle 1.

**DISCHARGE MEDICATIONS**

* Filgrastim 480 mcg SC daily for 5-7 days starting March 30
* Ondansetron 8 mg PO Q8H PRN nausea
* Prochlorperazine 10 mg PO Q6H PRN breakthrough nausea
* Morphine sulfate ER 30 mg PO BID
* Oxycodone 5 mg PO Q4H PRN breakthrough pain
* Senna-docusate 2 tabs PO BID PRN
* Metoclopramide 10 mg PO QID PRN early satiety
* Lisinopril 10 mg PO daily
* Apixaban 5 mg PO BID (pause if platelets < 50 G/l)
* Levothyroxine 112 mcg PO daily
* Sertraline 100 mg PO daily
* Pantoprazole 40 mg PO daily
* Furosemide 20 mg PO daily
* Tiotropium 18 mcg inhaled daily
* Albuterol/ipratropium inhaler 2 puffs QID PRN
* Propranolol 10 mg PO BID
* Vitamin D 2,000 IU daily
* Folic acid 1 mg daily

**FOLLOW-UP PLAN**

**Oncology**:

* CBC with differential in 7-10 days (April 5-8)
* Dr. Rodriguez in 2 weeks (April 12) for toxicity assessment and cycle 3 planning
* Pre-visit labs: CBC, CMP, LDH

**Imaging**:

* Restaging CT Chest/Abdomen/Pelvis after 4 cycles (May/June) or sooner if clinical decline
* Brain MRI surveillance April 15 (patient has never had brain metastases but at high risk given SCLC histology)

**Treatment Plan**:

* Continue topotecan for up to 6 cycles barring progression or toxicity
* If disease progresses, consider clinical trial options or lurbinectedin as third-line therapy
* If treatment causes significant decline in performance status or unacceptable toxicity, transition to best supportive care

**Supportive Care**:

* Dr. Thompson (Pulmonology) in 3 weeks (April 19) for pleural effusion assessment
* Palliative Care consult April 5 for comprehensive symptom management and advance care planning
* Social work arranged home health support for medication and filgrastim administration

**Patient Education**:

* Neutropenic precautions: report fever ≥38.0°C immediately
* Filgrastim self-administration instructions provided
* Dietary recommendations for maintaining nutrition
* Smoking cessation reinforced

**KEY LAB VALUES**

|  |  |  |  |
| --- | --- | --- | --- |
| **Parameter** | **Admission** | **Discharge** | **Reference** |
| WBC | 5.2 | 4.8 | 4.0-11.0 x10^9/L |
| ANC | 3.5 | 3.1 | 2.0-7.0 x10^9/L |
| Hgb | 10.5 | 10.2 | 13.5-17.5 g/dL (M) |
| Plt | 165 | 142 | 150-400 x10^9/L |
| Cr | 1.4 | 1.5 | 0.7-1.3 mg/dL |
| eGFR | 52 | 50 | >60 mL/min/1.73m² |
| AST/ALT | 45/42 | 48/45 | 10-35 U/L |
| Alk Phos | 185 | 190 | 40-150 U/L |
| LDH | 290 | 295 | 135-225 U/L |
| CRP | 8.5 | 10.2 | <5 mg/L |

**Electronically Signed**:  
Dr. V. Rodriguez (Medical Oncology)  
Dr. K. Thompson (Pulmonology)  
Date: 2024-03-29