UNIVERSITY MEDICAL CENTER

DEPARTMENT OF THORACIC ONCOLOGY

DISCHARGE SUMMARY

DIAGNOSES:

- 1. Stage IV EGFR-mutated (Exon 19 deletion) non-small cell lung cancer with adrenal metastasis
- 2. Treatment-related rash (Grade 2)
- 3. Paroxysmal atrial fibrillation
- 4. Mild hypothyroidism
- 5. Migraine headaches

DATE OF CANCER DIAGNOSIS: June 7, 2023

REASON FOR ADMISSION:

The patient was admitted for management of worsening skin rash and evaluation of new-onset palpitations. The rash was likely related to osimertinib therapy, which she has been receiving since June 29, 2023, for EGFR-mutated NSCLC.

HISTORY OF PRESENT ILLNESS:

Ms. Parker is a 52-year-old female diagnosed with stage IV EGFR-mutated (Exon 19 deletion) adenocarcinoma of the lung in June 2023. She originally presented with persistent dry cough, right-sided chest discomfort, and fatigue. CT imaging revealed a 3.2 cm right lower lobe mass with a solitary right adrenal metastasis measuring 2.6 cm. PET/CT confirmed hypermetabolic activity in both lesions with no other areas of concern. Brain MRI was negative for metastatic disease.

Tissue diagnosis was obtained via CT-guided biopsy of the primary lung lesion, confirming moderately differentiated adenocarcinoma. Molecular testing revealed EGFR Exon 19 deletion. PDL1 immunohistochemistry showed expression in 22% of tumor cells (TPS 22%, CPS 25%, IC 5%).

The patient initiated first-line therapy with osimertinib 80mg daily on June 29, 2023, with excellent radiographic and symptomatic response. Recent imaging showed a reduction in primary tumor size to 0.8 cm and adrenal metastasis to 1.1 cm.

Current admission was prompted by progressively worsening papulopustular skin rash on face, chest, and back over the past 3 weeks (Grade 2), as well as intermittent palpitations noted over the past week.

PAST MEDICAL HISTORY:

- 1. Paroxysmal atrial fibrillation diagnosed 2018, well-controlled on medication
- 2. Migraine headaches with visual aura (diagnosed 2010)
- 3. Mild hypothyroidism diagnosed 2019
- 4. Cesarean section (2005)
- 5. Appendectomy (1995)

SOCIAL HISTORY:

Ms. Parker is a never-smoker. She works as a high school mathematics teacher but is currently on medical leave. She is married with two children. Denies alcohol use. Occasional caffeine consumption.

ALLERGIES:

Penicillin (hives)

HOME MEDICATIONS PRIOR TO ADMISSION:

- 1. Osimertinib 80mg PO daily
- 2. Levothyroxine 50mcg PO daily
- 3. Metoprolol succinate 25mg PO daily
- 4. Apixaban 5mg PO BID
- 5. Sumatriptan 50mg PO PRN for migraine
- 6. Vitamin D3 2000 IU PO daily
- 7. Calcium carbonate 600mg PO daily

PHYSICAL EXAMINATION AT ADMISSION:

Vital Signs:

• Temperature: 37.1°C

Heart Rate: 98 bpm, irregular
Blood Pressure: 128/76 mmHg
Respiratory Rate: 16/min
SpO2: 98% on room air

General: Moderately distressed due to skin discomfort, otherwise well-appearing female appearing stated age.

HEENT: Normocephalic, atraumatic. Papulopustular rash on face, predominantly on cheeks and forehead. Conjunctivae clear. Oropharynx without lesions.

Neck: Supple, no lymphadenopathy or thyromegaly.

Cardiovascular: Irregular rhythm, normal S1 and S2, no murmurs, rubs, or gallops.

Respiratory: Clear breath sounds bilaterally, no wheezes, rhonchi, or rales.

Abdomen: Soft, non-tender, non-distended. No hepatosplenomegaly.

Skin: Papulopustular rash (Grade 2) on face, upper chest, and upper back.

Neurologic: Alert and oriented x3. Cranial nerves II-XII intact. Motor strength 5/5 in all extremities. Sensory exam normal.

DIAGNOSTIC STUDIES DURING ADMISSION:

Laboratory Data:

- CBC:
 - o WBC: 5.3 K/μL (normal range: 4.5-11.0)
 - o RBC: $4.11 \text{ M/}\mu\text{L}$ (normal range: 3.80-5.10)
 - o Hemoglobin: 12.3 g/dL (normal range: 12.0-15.5)
 - o Hematocrit: 37.2% (normal range: 35.0-45.0)
 - O Platelets: 172 K/μL (normal range: 150-400)
- CMP:
 - o Sodium: 139 mEq/L (normal range: 135-145)
 - o Potassium: 4.3 mEq/L (normal range: 3.5-5.0)
 - o Chloride: 102 mEq/L (normal range: 98-108)
 - o CO2: 25 mEq/L (normal range: 22-29)
 - o BUN: 15 mg/dL (normal range: 7-20)
 - o Creatinine: 0.82 mg/dL (normal range: 0.6-1.1)
 - o Glucose: 97 mg/dL (normal range: 70-100)
 - o Calcium: 9.4 mg/dL (normal range: 8.5-10.5)
 - o Total Protein: 6.8 g/dL (normal range: 6.0-8.3)
 - o Albumin: 4.0 g/dL (normal range: 3.5-5.0)
 - o Total Bilirubin: 0.6 mg/dL (normal range: 0.3-1.0)
 - o AST: 28 U/L (normal range: 10-40)
 - o ALT: 31 U/L (normal range: 7-56)
 - o Alkaline Phosphatase: 72 U/L (normal range: 44-147)
- Thyroid Function:
 - \circ TSH: 5.2 μ IU/mL (normal range: 0.4-4.0) Elevated
 - o Free T4: 0.9 ng/dL (normal range: 0.8-1.8)
- Cardiac Enzymes:
 - o Troponin I: <0.04 ng/mL (normal: <0.04)
 - o BNP: 42 pg/mL (normal: <100)

ECG: Atrial fibrillation with controlled ventricular response, rate 90-100 bpm. No ST-segment or T-wave abnormalities.

Chest X-ray: Right lower lobe opacity significantly decreased compared to prior studies. No pleural effusion or pneumothorax.

Echocardiogram: Normal left ventricular ejection fraction (60%). No structural abnormalities. Mild left atrial enlargement. No valvular disease.

CT Chest/Abdomen/Pelvis with Contrast (April 7, 2025):

- Right lower lobe primary lung mass decreased to 0.8 cm (previously 1.1 cm in January 2025)
- Right adrenal metastasis decreased to 1.1 cm (previously 1.3 cm in January 2025)
- No new metastatic lesions
- No evidence of pulmonary embolism
- Incidental 1.2 cm simple cyst in left kidney, unchanged

Dermatology Consultation: Papulopustular rash consistent with EGFR inhibitor-associated dermatologic toxicity, Grade 2. Skin punch biopsy performed from upper back lesion to rule out other etiologies.

Skin Biopsy Result: Neutrophilic suppurative folliculitis with perifollicular lymphocytic inflammation. Findings consistent with EGFR inhibitor-induced rash. No evidence of infection or malignancy.

HOSPITAL COURSE:

The patient was admitted for management of worsening skin rash likely related to osimertinib therapy and evaluation of new-onset palpitations.

Dermatologic Management: Dermatology was consulted and diagnosed Grade 2 EGFR inhibitor-associated rash. Treatment initiated with topical clindamycin 1% solution BID, topical hydrocortisone 1% cream BID, and oral doxycycline 100mg BID. Proper skin care regimen with gentle cleansers and moisturizers was initiated. Osimertinib was temporarily interrupted for 3 days, then resumed at the same dose (80mg daily).

Cardiovascular Management: Cardiology was consulted for management of atrial fibrillation. ECG confirmed atrial fibrillation with controlled ventricular response. Echocardiogram showed normal left ventricular function with mild left atrial enlargement. Metoprolol dose was increased from 25mg to 50mg daily, and apixaban was continued at 5mg BID. Patient was instructed on symptom monitoring and when to seek medical attention for worsening palpitations.

Endocrine Management: Elevated TSH was noted, indicating suboptimal control of hypothyroidism. Levothyroxine dose was increased from 50mcg to 75mcg daily. Follow-up thyroid function testing was recommended in 6 weeks.

Oncologic Management: The patient's recent imaging demonstrated continued response to osimertinib with further decrease in size of both the primary lung lesion and adrenal metastasis. No new metastatic sites were identified. After a 3-day interruption due to skin toxicity, osimertinib was resumed at the standard dose of 80mg daily with close monitoring of skin symptoms.

By discharge, the patient's skin rash had shown improvement with topical and oral therapies. Atrial fibrillation was rate-controlled with adjusted beta-blocker dosing. The patient was educated about potential side effects of osimertinib and instructed to monitor for worsening symptoms.

DISCHARGE MEDICATIONS:

- 1. Osimertinib 80mg PO daily
- 2. Levothyroxine 75mcg PO daily (INCREASED from 50mcg)
- 3. Metoprolol succinate 50mg PO daily (INCREASED from 25mg)
- 4. Apixaban 5mg PO BID
- 5. Doxycycline 100mg PO BID for 14 days
- 6. Clindamycin 1% topical solution BID
- 7. Hydrocortisone 1% cream BID
- 8. Mild moisturizing cream (Cerave) to be applied BID
- 9. Sumatriptan 50mg PO PRN for migraine
- 10. Vitamin D3 2000 IU PO daily
- 11. Calcium carbonate 600mg PO daily

DISCHARGE INSTRUCTIONS:

- 1. Continue all medications as prescribed
- 2. Use gentle skin cleansers and avoid harsh soaps
- 3. Apply generous amounts of moisturizer at least twice daily
- 4. Avoid direct sun exposure and use broad-spectrum SPF 30+ sunscreen when outdoors
- 5. Monitor skin condition daily and report worsening symptoms promptly
- 6. Check pulse daily and record in symptom diary
- 7. Report new or worsening symptoms (shortness of breath, chest pain, syncope, severe palpitations) immediately
- 8. Follow specific dietary recommendations for patients on apixaban

FOLLOW-UP APPOINTMENTS:

- 1. Dr. Sophia Rodriguez (Medical Oncology): April 25, 2025 at 10:00 AM
- 2. Dr. Michael Chang (Dermatology): April 18, 2025 at 2:30 PM
- 3. Dr. Jennifer Lee (Cardiology): May 2, 2025 at 11:15 AM
- 4. Dr. Rebecca Klein (Endocrinology): May 20, 2025 at 9:00 AM
- 5. Thyroid function testing: May 23, 2025
- 6. CT Chest/Abdomen/Pelvis: July 7, 2025
- 7. Brain MRI (surveillance): July 7, 2025

ONCOLOGIC ASSESSMENT:

Ms. Parker was diagnosed with stage IV EGFR-mutated (Exon 19 deletion) lung adenocarcinoma in June 2023. She has a solitary adrenal metastasis without evidence of other distant disease. PD-L1 testing at diagnosis showed TPS 22%, CPS 25%, IC 5%.

She was initiated on first-line osimertinib 80mg daily on June 29, 2023, and has demonstrated excellent response to therapy with reduction of primary tumor from 3.2 cm to 0.8 cm (75% reduction) and adrenal metastasis from 2.6 cm to 1.1 cm (58% reduction).

She has experienced Grade 2 dermatologic toxicity, which is being managed with topical and oral therapies. This side effect is common with EGFR-targeted therapies and not indicative of treatment failure. Other than this dermatologic toxicity, the patient has tolerated osimertinib well.

Current disease status is classified as partial response with ongoing clinical benefit. We anticipate continued response to osimertinib with appropriate side effect management. Patients with EGFR Exon 19 deletion typically demonstrate favorable responses to osimertinib with median progression-free survival often exceeding 18-24 months.

DISCHARGE CONDITION: Stable. Patient discharged home with improved dermatologic symptoms, rate-controlled atrial fibrillation, and continued oncologic response to targeted therapy.

Electronically signed: Sophia Rodriguez, MD, PhD Medical Oncology University Medical Center License #: 12345678 Date: April 09, 2025, 15:37

PATIENT INFORMATION:

Patient ID: SYN028 Name: Emily Parker DOB: May 6, 1972

Admission Date: April 5, 2025 Discharge Date: April 09, 2025

Attending Physician: Dr. Sophia Rodriguez