PACIFIC MEDICAL CENTER

THORACIC ONCOLOGY PROGRAM

DISCHARGE SUMMARY

PATIENT: Suzy Fortnight (ID: SYN186)
DOB: 04/03/1967
ADMISSION: 04/05/2025
DISCHARGE: 04/14/2025
ATTENDING: Dr. J. Rivera, Medical Oncology

DISCHARGE DIAGNOSIS

1. Entrectinib-induced cerebellar toxicity
2. ROS1 fusion-positive non-small cell lung cancer, stage IVA, on targeted therapy

HISTORY OF PRESENT ILLNESS

58-year-old female with ROS1 fusion-positive NSCLC diagnosed in April 2023, on entrectinib since May 2023 with excellent disease control, presented with 2-week history of progressive ataxia, dysarthria, and difficulty with fine motor coordination. Symptoms began insidiously with mild imbalance and progressed to inability to walk without assistance. No headache, vision changes, or constitutional symptoms.

ONCOLOGIC HISTORY

Diagnosis: Metastatic NSCLC, diagnosed 04/26/2023
Initial presentation: Persistent cough, chest pain, 10-pound weight loss

Histopathology:

- Right upper lobe mass, CT-guided core needle biopsy (4/20/2023)
- Microscopic: Moderately differentiated adenocarcinoma with predominantly acinar pattern (60%), papillary features (30%), and micropapillary component (10%)
- Tumor cells demonstrate moderate nuclear pleomorphism with prominent nucleoli and moderate amount of eosinophilic cytoplasm
- Focal areas of necrosis present
- Mitotic rate: 6 mitoses/10 HPF
- No lepidic growth pattern identified

Immunohistochemistry:

- TTF-1: Strongly positive (diffuse nuclear)
- Napsin A: Positive (granular cytoplasmic)
- CK7: Positive (membranous and cytoplasmic)

- p40: Negative
- CK20: Negative
- Synaptophysin: Negative
- Chromogranin: Negative
- CDX2: Negative

Molecular Studies:

- Next-Generation Sequencing:
  - ROS1-CD74 fusion (exon 34 of ROS1 fused to exon 6 of CD74)
  - TP53 R273H mutation (VAF 42%)
  - No other actionable alterations
- FISH: ROS1 rearrangement confirmed (38% of cells positive)
- PD-L1 (22C3): TPS <1%, CPS 5, IC 2%

Staging:

- T2bN1M1a (Stage IVA)
- Sites of metastasis: Right adrenal gland (3.5cm)

Prior Treatment:

- Entrectinib 600mg daily since 05/18/2023
- Last imaging (02/2025): Near-complete response with 90% reduction in primary tumor size and 80% reduction in adrenal metastasis

HOSPITAL COURSE

MRI brain on admission showed no evidence of metastatic disease, leptomeningeal disease, or stroke. Entrectinib was held upon admission due to suspected drug-induced cerebellar toxicity. Neurological examination demonstrated cerebellar signs including dysdiadochokinesia, dysmetria, ataxic gait, and intention tremor.

Patient began to show significant improvement in neurological symptoms within 72 hours of discontinuing entrectinib. Formal neuropsychological testing confirmed cerebellar dysfunction without cognitive impairment. Serial exams showed progressive improvement in coordination and gait.

Multidisciplinary tumor board discussion recommended transition to crizotinib, an alternative ROS1 inhibitor with less CNS penetration and lower incidence of cerebellar toxicity. Baseline CT chest/abdomen/pelvis prior to discharge showed continued excellent disease control with no evidence of progression during the drug holiday.

Physical therapy was initiated with focus on gait training and balance exercises. By discharge, patient was able to ambulate with minimal assistance and demonstrated significant improvement in coordination.

DIAGNOSTIC STUDIES

MRI Brain (04/05/2025):

- No evidence of intracranial metastases, leptomeningeal disease, or ischemia
- No structural cerebellar abnormality
- Normal ventricular size

CT Chest/Abdomen/Pelvis (04/12/2025):

- Right upper lobe primary tumor decreased to 0.8cm (90% reduction from baseline)
- Right adrenal metastasis decreased to 0.7cm (80% reduction from baseline)
- No new metastatic lesions
- No lymphadenopathy

DISCHARGE PLAN

1. **Medications:**
    - Crizotinib 250mg PO BID to start on 04/16/2025
    - Hold entrectinib permanently
    - Continue home medications
2. **Follow-up:**
    - Oncology: Dr. Rivera in 1 week (04/21/2025)
    - Neurology: Dr. Chen in 2 weeks (04/28/2025)
    - Physical therapy: Outpatient 3 times weekly for 4 weeks
3. **Monitoring:**
    - Weekly neurological assessment during transition to crizotinib
    - Repeat CT chest/abdomen/pelvis in 8 weeks to assess response to crizotinib

CONDITION AT DISCHARGE

Patient significantly improved with near resolution of dysarthria, mild residual ataxia, and ability to ambulate with minimal assistance. ECOG performance status improved from 3 at admission to 1 at discharge.

Electronically signed by:
Dr. J. Rivera, MD
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