**Patient**: William Foster (DOB 1978-10-10)  
**MRN**: 924635  
**Admission**: 2025-03-25 | **Discharge**: 2025-04-02  
**Physicians**: Dr. N. Chen (Neuro-Oncology), Dr. V. Patel (Neurology)

**Discharge diagnosis: PCNSL cycle 3 MATRix**

**1. Oncological Diagnosis**

* **Primary**: PCNSL (Diagnosed January 12, 2025)
* **Histology**: Diffuse proliferation of large atypical lymphoid cells with prominent nucleoli
* **Immunohistochemistry**: CD20+, CD79a+, BCL2+, BCL6+, MUM1+, CD3-, CD5-, CD10-, Ki-67: 80%
* **Additional markers**: MYC+ (30%), Double expressor (MYC+/BCL2+) without gene rearrangements
* **Molecular**: No MYD88 L265P mutation, confirmed monoclonal B-cell population
* **IELSG Score**: 2 (Elevated LDH +1, Deep brain involvement +1)
* **MSKCC Score**: Class 1 (Age < 50, KPS ≥ 70)
* **Imaging**:
  + MRI: Right frontal (4.0 × 3.5 cm) and left thalamic (2.5 × 2.0 cm) enhancing lesions
  + PET/CT: Hypermetabolic lesions (SUVmax 18.2, 12.4), no systemic disease
  + CSF: Negative for malignant cells, protein 38 mg/dL
  + Bone marrow: No lymphoma involvement
  + HIV, Hepatitis B/C: Negative

**2. Current Treatment**

* **MATRIX Cycle 3** (March 26-30, 2025):
  + Rituximab 375 mg/m² IV (days 0, 5)
  + Methotrexate 3.5 g/m² IV (day 1)
  + Cytarabine 2 g/m² IV q12h (days 2-3, 4 doses)
  + Thiotepa 30 mg/m² IV (day 4)
  + Lipegfilgrastim 6 mg (day 6)
* **Supportive Care**:
  + Leucovorin rescue: 15 mg/m² IV q6h until methotrexate <0.1 μmol/L
  + Alkaline hydration (urine pH >7.0)

**3. Treatment History**

* **Initial**: Dexamethasone 16 mg IV daily × 5 days (January)
* **MATRIX** Cycles 1-2: February 2025 (completed with stem cell mobilization)
* **Response after Cycle 2**: Partial Response
  + Right frontal: 2.1 × 1.7 cm (from 4.0 × 3.5 cm)
  + Left thalamic: 1.1 × 0.8 cm (from 2.5 × 2.0 cm)
  + Marked reduction in surrounding edema

**4. Comorbidities**

* L4-L5 discectomy (2015), chronic lower back pain
* Moderate OSA (CPAP compliant)
* Former smoker (quit 2017)
* MDD (controlled)
* Hypercholesterolemia
* Allergies: Sulfa drugs (rash), Latex (urticaria)

**5. Hospital Course**

Patient received complete MATRIX regimen with appropriate supportive care. Experienced grade 4 neutropenia (ANC nadir 0.2 × 10^9/L), grade 3 thrombocytopenia (platelet nadir 28 × 10^9/L), grade 2 mucositis, and grade 1 nausea. Methotrexate levels monitored to 0.08 μmol/L at discharge. Neurologically stable with slight improvement in right pronator drift. By discharge: neutrophils recovering to 1.2 × 10^9/L, platelets 56 × 10^9/L, mucositis improving.

**6. Discharge Medications**

**New**:

* Loperamide 2 mg PO PRN (max 8 mg/24h)
* Magic mouthwash 5-10 mL Q4H PRN

**Continued**:

* Acyclovir 400 mg PO BID
* Atovaquone 1500 mg PO daily with food
* Dexamethasone 4 mg PO daily (taper by 2 mg every 3 days)

**Chronic**:

* Atorvastatin 20 mg PO daily
* Sertraline 100 mg PO daily
* Acetaminophen 650 mg PO Q6H PRN
* Zolpidem 5 mg PO QHS PRN

**7. Follow-up**

* Dr. N. Chen in 1 week (April 9, 2025)
* CBC with differential 3× weekly until recovery
* CMP weekly until normalized
* Cycle 4 MATRIX tentatively April 15-20, 2025 (pending counts)
* MRI Brain after Cycle 4 completion
* Post-induction plans:
  + Complete response: Consider high-dose chemotherapy with autologous SCT
  + Partial response: Additional chemotherapy/alternative regimens
* Neuropsychological testing after induction completion

**8. Lab Values (Admission → Nadir/Peak → Discharge)**

* WBC: 4.8 → 0.6 → 2.8 × 10^9/L
* ANC: 3.1 → 0.2 → 1.2 × 10^9/L
* Hemoglobin: 10.5 → 9.6 → 9.8 g/dL
* Platelets: 132 → 28 → 56 × 10^9/L
* Creatinine: 0.9 → 1.2 → 0.9 mg/dL
* LDH: 265 → - → 248 U/L
* Methotrexate: - → 73.4 → 0.08 μmol/L
* Potassium: 4.0 → 3.4 → 3.8 mmol/L

**Electronically Signed By**:  
Dr. N. Chen (Neuro-Oncology) - 2025-04-02 14:30  
Dr. V. Patel (Neurology) - 2025-04-01 16:45