Medical Imaging Report

Patient Name: Mr. Peter David

Patient ID: PA-1058

Date of Scan: 10/05/2021

Referring Physician: Dr. Stephan Miller

Scan Modality: Magnetic Resonance Imaging (MRI)

Region of Interest: Brain

Clinical Details

The patient is a 45-year-old male presenting with the following symptoms:

- Persistent headaches for the past two months, primarily localized to the frontal region, worsening in the mornings.
- Recent onset of seizures, described as generalized tonic-clonic episodes, occurring twice in the past three weeks.
- Progressive weakness in the left upper and lower extremities over the last month, with associated difficulty in coordination and gait imbalance.
- Reports of occasional blurred vision and episodes of nausea and vomiting.

Imaging Findings

- 1. A focal lesion is identified in the right hemisphere, frontal, parietal, or temporal lobe, showing contrast enhancement.
 - The lesion is hyperintense on T1-weighted imaging and shows surrounding edema, indicative of a potential pathological process.
- 2. The lesion's size, borders, and contrast uptake are suggestive of an active abnormality.
- 3. Adjacent brain tissue demonstrates signs of mass effect.
- 4. No evidence of hemorrhage, hydrocephalus, or significant atrophy is noted.

Differential Diagnosis

The findings are consistent with a range of possible diagnoses, including:

• Primary brain tumor (e.g., glioblastoma, meningioma).

- · Secondary metastasis.
- Infective or inflammatory lesions (e.g., abscess).

Further diagnostic workup is recommended to narrow the differential diagnosis.

Recommendations

- 1. **Further Imaging**: Obtain additional imaging sequences (e.g., diffusion-weighted imaging, MR spectroscopy, or perfusion studies) to better characterize the lesion.
- 2. **Biopsy**: Consider histopathological evaluation via biopsy for definitive diagnosis if clinically indicated.
- 3. **Consultations**: Referral to a neurologist or oncologist for comprehensive evaluation.
- 4. **Laboratory Workup**: Assess for markers of infection, inflammation, or malignancy as appropriate.

Radiologist's Name: Mr. Willion D. C

Signature: Mr. Willion D. C

Date: 15/05/2021