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Introduction

- This case report highlights the significance of short-term neurologic evaluation in the field of rehabilitation medicine for the timely detection of new neurologic metastasis in patients with metastatic cancer.

Case report

- In February 2023, a 75-year-old man with a history of testicular diffuse large B-cell lymphoma (DLBCL) underwent left orchiectomy. In July 2023, at another hospital, he was diagnosed with **right basal ganglia metastases** with sudden **left-sided weakness**. Subsequently, he received chemotherapy and steroid therapy. Upon discharge **on September 1**, a neurological examination indicated Medical Research Council (MRC) grade 3 weakness in the left upper and lower extremities and **no weakness on the right**.
- On September 4, 2023**, the patient was admitted to our hospital's Department of Rehabilitation Medicine for immobility syndrome following cancer-related treatment. The neurological evaluation at admission revealed **decreased muscle strength in the right lower extremity**, contrasting with normal findings just 3 days earlier at the previous hospital discharge. **Proximal weakness was determined as MRC grade 1, and distal weakness was MRC grade 2**. The family attributed the lower limb weakness to deconditioning. However, we suspected that the acute neurological changes (**paraplegia pattern rather than hemiparesis**), which occurred anew in 3 days, were due to metastasis to the spinal cord nerves, and referred him to a higher level medical institution. Further evaluation at the referring higher level medical institution **on September 5, 2023, revealed a leptomeningeal seeding along the cauda equina at the L1 level**.
- As a result of this discovery, **the treatment approach was modified** from the existing rituximab/lenalidomide chemotherapy to ommaya reservoir insertion and intrathecal chemotherapy (methotrexate with hydrocortisone), which was initiated on September 8, 2023. On September 19, 2023, radiotherapy was administered to the L5-S2 spinal cord area for neurolymphomatosis.

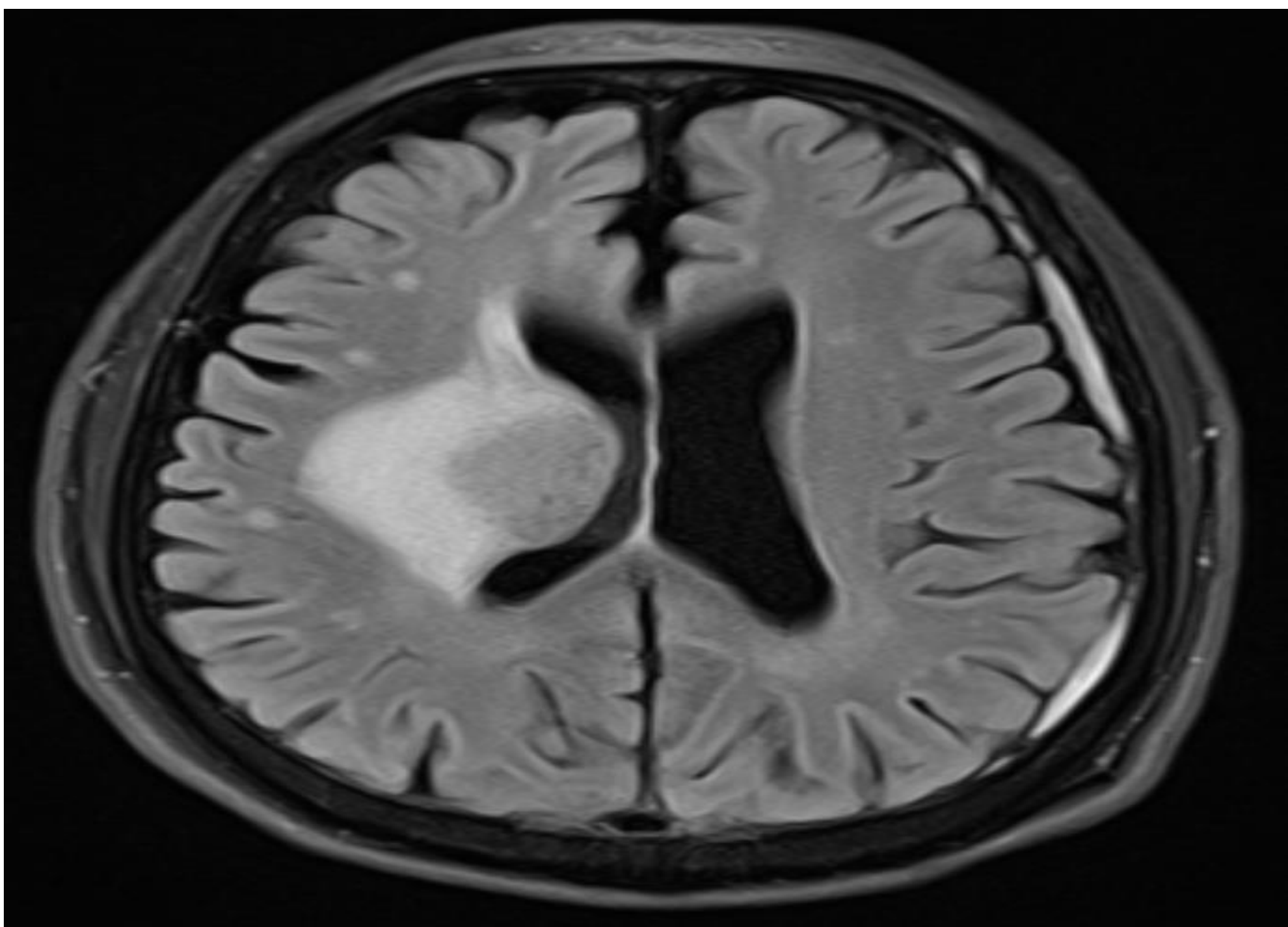


Figure 1. Brain MRI involving Rt. basal ganglia (July, 2023)

Muscle Power	23.09.01	23.09.04
Upper limb (Proximal)	N/F-	N/F-
Upper limb (Distal)	N/F-	N/F-
Lower limb (Proximal)	N/F+	T/F+
Lower limb (Distal)	N/F+	P-/F+

Table 1. Changes in strength testing at transfer from other hospitals



Figure 2. Spine MRI; leptomeningeal seeding along cauda equina from L1 (6th Sep, 2023)

Conclusion

- This case underscores the early detection of new neurological metastasis through short-term neurological examinations in the field of rehabilitation medicine for patients with metastatic cancer, leading to a modification in the approach to anticancer treatment.