

Amyotrophic lateral sclerosis



Case contributed by Yuliia Solodovnikova

● Diagnosis certain

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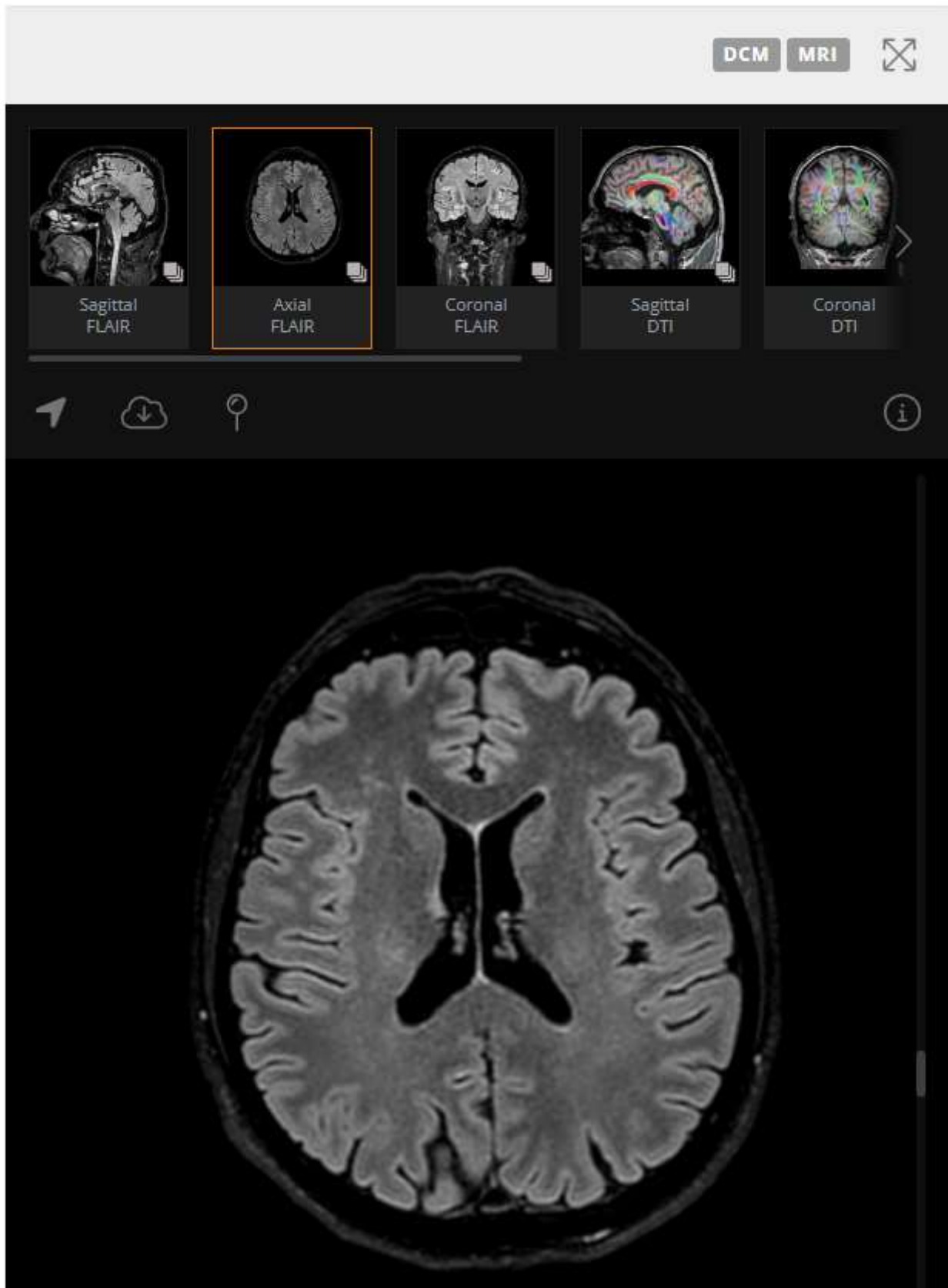
Presentation

The patient presented with a 2-year history of progression of combined tetraparesis and severe pseudobulbar palsy.

Patient Data

Age: 50 years

Gender: Male



FLAIR sequences reveal hyperintensities of the corticospinal tracts (CST) bilaterally ("wine glass" sign).

Fractional anisotropy (FA) along the right CST is reduced.

There is an apparent diffusion coefficient (ADC) elevation at the brainstem level (cerebral peduncles and medulla) within the right CST and at the level of the centrum semiovale and medulla within the left one.

Case Discussion

Atypical values of FA and ADC indicate microstructural changes resulting from a reduction in neurone count and myelin volume within the corticospinal tracts.

The presence of the 'wine glass' sign is a common occurrence among patients with CST involvement.

NCS/EMG results revealed indications of motor neurone disease.

Based on these factors and the patient's clinical presentation, the diagnosis of amyotrophic lateral sclerosis was confirmed.