NEUROPSYCHIATRIC SYSTEMIC LUPUS ERYTHEMATOUS PRESENTING AS VERTICAL GAZE PALSY AND INTRAORAL NUMBNESS:
A CASE REPORT WITH CLINICAL, NEUROANATOMICAL AND RADIOLOGICAL CORRELATION

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Presenting complaint
- She complained of blurring of vision and diplopia in multiple directions that were progressively worsened over three days
- There was left intraoral numbness over the upper palate, buccal mucosa and tongue

Physical examination
- Bilateral vertical gaze palsy, especially with upward eye movement (Figure 1) were observed. The diplopia was present in almost all directions and disappeared upon cover test.
- There was decreased touch sensation over left upper palate, buccal mucosa and anterior hemi-tongue.

Blood test
- ESR (42 mm/hr)
- Anti-dsDNA (33-139 IU/ml)
- Proteinuria (Sp protein/Cr: 0.19mg/mgCr)
- ve Anti-Ro/SSA, Anti-Sm and Anti-RNP
- Albumin (31g/l)

Urine
- Proteinuria

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Discussion
- The vertical gaze center (including the riMLF and INC) located in the rostral midbrain controls the ocular motility. Thus, the disruption in conjugate movement of both eyes was observed mostly at upward direction.
- Ipsilateral intraoral numbness could be attributed to the involvement of the left mesencephalic trigeminal nucleus (responsible for the sensory innervation of the hard palate) and DTTT (which forms the dorsomedial division of the chief sensory nucleus)
- Treatment strategy of intensive immunosuppression was supported by the predominant inflammatory nature of the lesion on MRI.

Treatment
- She was treated with i.v. methylprednisolone (three grams in total) and monthly intravenous cyclophosphamide (500-1000mg/m2/dose), followed by aspirin, hydroxychloroquine and a tapering course of oral prednisolone.
- Follow-up MRI brain one month after treatment showed complete resolution of the left midbrain lesion (Figure 3).