

Case	(329) Tumefactive multiple sclerosis: a case report
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CASE PRESENTATION

We present a case of a 26-year-old woman who presented to our emergency room with motor aphasia. Symptoms began suddenly five to six hours prior to arrival. Patient did not present another neurological deficit or symptoms such as headache, fever or symptoms of infection. She was initially diagnosed with acute ischemic attack in our hospital.

Urgent non-contrast brain CT showed a juxtacortical left parietal hypodense area, with digitiform aspect and mass effect on the occipital horn of left lateral ventricle. CT perfusion and CT angiography did not show pathological alterations. Fluid attenuated inversion recovery (FLAIR) MRI sequence showed a hyperdense area with perilesional edema. T1-weighted contrast-enhanced imaging showed incomplete and nodular enhancement and diffusion-weighted imaging revealed a peripheral area of restricted diffusion.

These findings were suspicious for atypical active plaque of tumefactive multiple sclerosis (MS). In addition, there were other small hyperdense areas in the calloseseptal interface and periventricular bilateral frontal and temporal lobe region.

The patient was treated with dexamethasone and showed clinical improvement after a week. On follow-up MRI, the larger nodular lesion showed no enhancement, probably because of the steroid treatment.

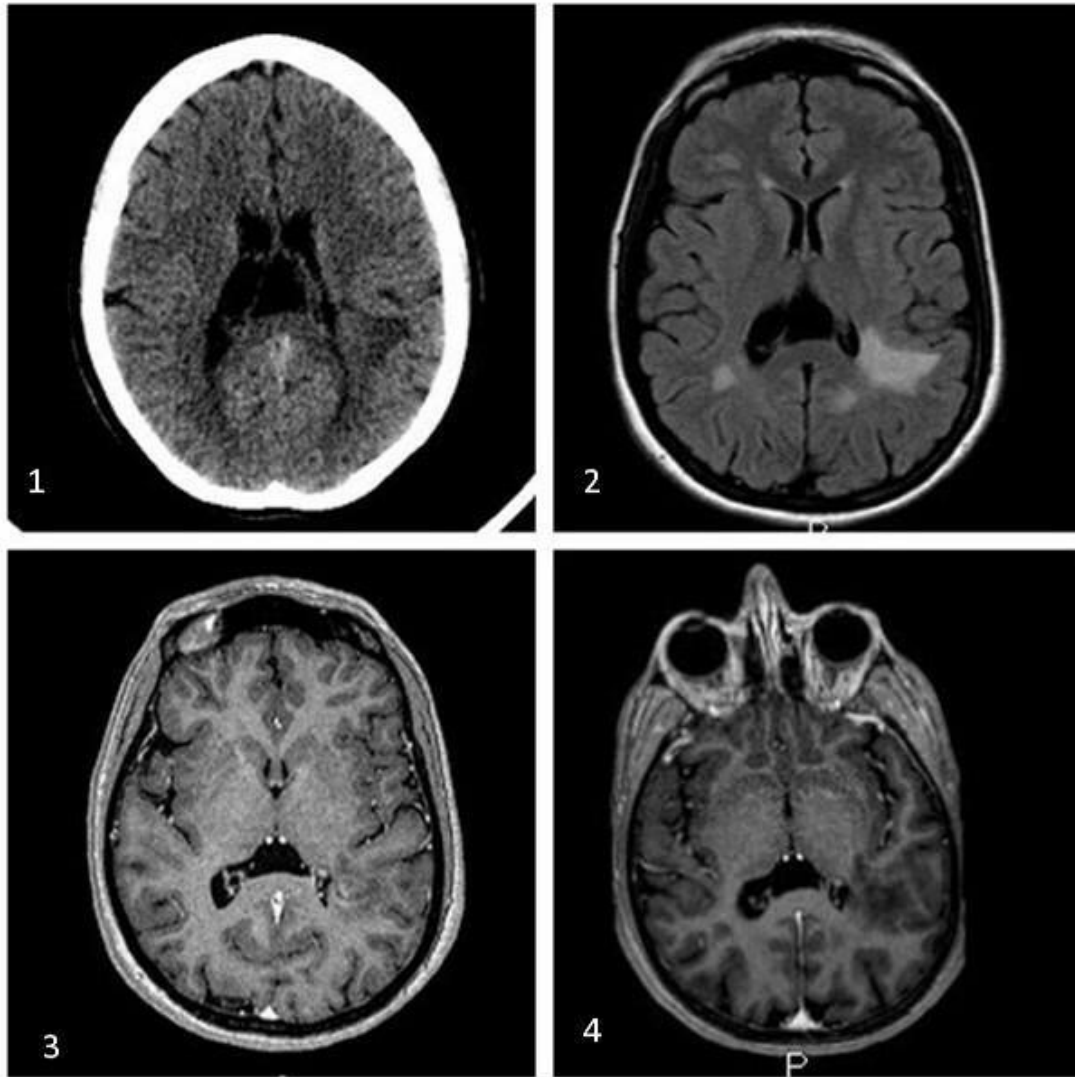
DISCUSSION

MS plaques usually appear as well demarcated, homogenous small ovoid lesions on MRI. Atypical radiographic features of MS lesions include greater than 2 cm size, mass effect and edema.

Tumefactive MS lesions can radiographically mimic infarction or intracranial neoplasms. In our case presentation, clinical improvement after treatment and radiological follow up was crucial for supporting the diagnosis of tumefactive MS.

CONCLUSION

Tumefactive MS can be radiographically and clinically misdiagnosed as it can be mistaken by other conditions such as infarction, infections and tumours.



1.Non contrast brain TC. Left parietal hypodense area. **2.**FLAIR MRI sequence. Hyperintensity area with nodular enhancement on T1-weighted contrast-enhanced sequence (**3**). **4.** T1-weighted contrast-enhanced sequence. The lesion shows no enhancement a week after steroid treatment.

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