

# “My ovaries are making me crazy” - A Case Report of NMDA-R encephalitis in a young woman



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## Background

Anti-N-methyl-D-aspartate receptor (NMDA-R) encephalitis is a rare paraneoplastic syndrome related to ovarian teratomas. Neural tissue within the teratoma triggers the production of NMDA-R antibodies which attack the nervous system and cause dysfunction of the NMDA receptors within the limbic system. It often presents with a range of psychiatric and neurological symptoms and affects young women.

## Aims

Aims: Most cases in the literature treat this condition with oophorectomy, given our patients young age and nulliparity, we elected to treat this with cystectomy instead and report on a curative outcome for our patient.

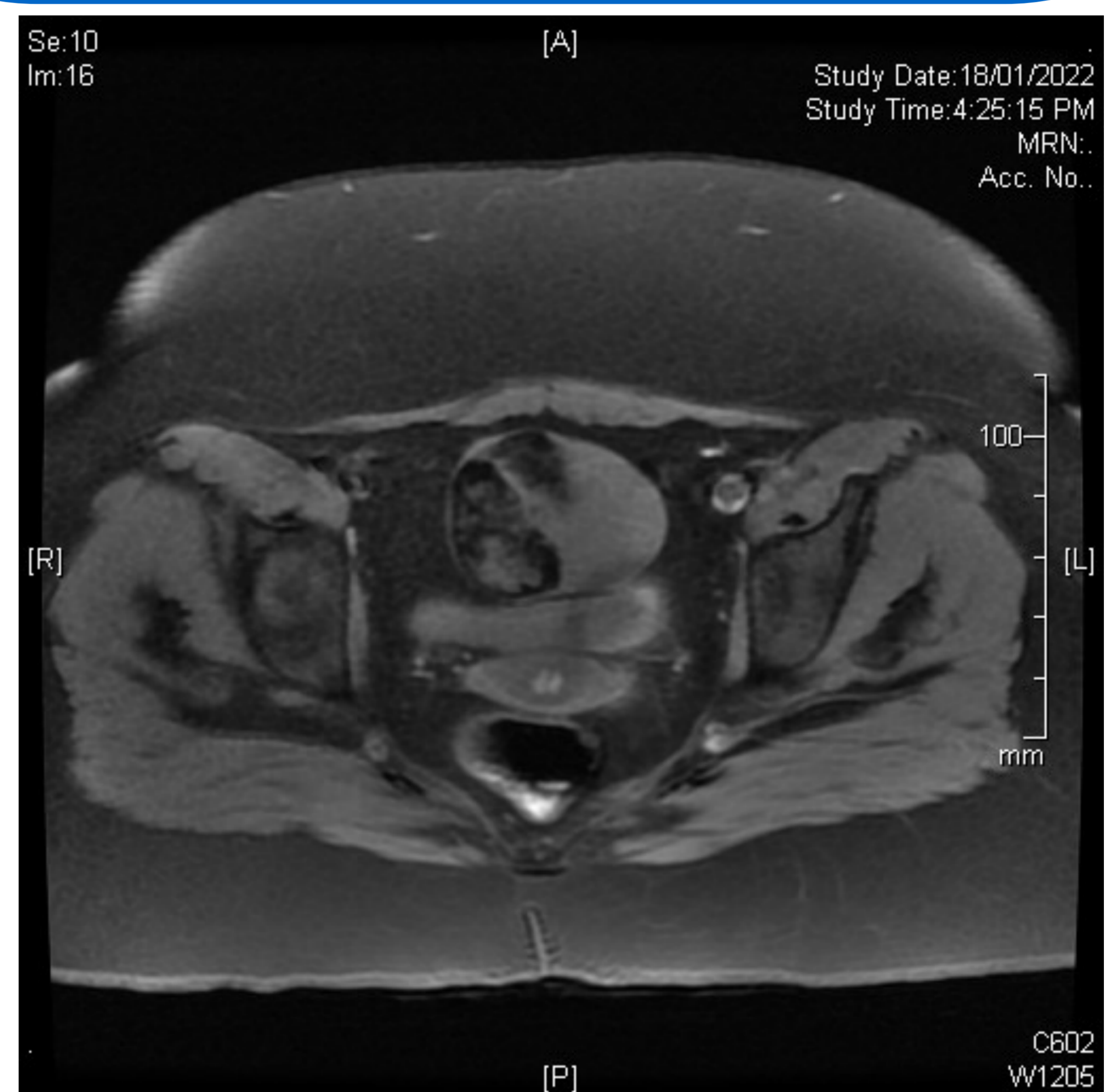


## Case

A previously highly functioning 22yo woman presented to the emergency department with seizures, confusion and urinary retention. During her admission she suffered from significant mood and cognitive disturbance with episodes of severe anxiety and memory loss. Her CT Brain and MRI were normal and CSF results were positive for NMDA-R antibodies. US pelvis showed bilateral ovarian masses consistent with dermoid cysts. She received IVIG and high dose steroids and underwent an emergency laparoscopic bilateral ovarian cystectomy.

The histopathology was consistent with mature cystic teratomas. Following the surgical removal of her teratomas coupled with medical management the patient had a rapid resolution of her psychiatric and neurological symptoms. She had a significant improvement in both her memory and her mood and her seizures stopped.

Six months post operatively she has reported no ongoing symptoms of encephalitis and her medications are being successfully weaned.



## Discussion & Conclusion

NMDA-R encephalitis is a rare neuropsychiatric disorder that has significant morbidity and mortality for patients. Cystectomy rather than oophorectomy is a reasonable surgical treatment for this condition in young nulliparous women. Early recognition and treatment with a multi-disciplinary approach leads to positive patient outcomes.

### References

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### Disclosure

Disclose any relationship

