

Excluding The Medical Causes

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Presentation

- 55F
- 'States has had poor sleep for approx 1/52 and feels as though she is spaced and has 'brain fog'. appetite has deteriorated too o/a alert to date and year, seems coherent, no previous insomnia, mental health has underactive thyroid'.

- Insomnia for circa 2/52.
- Confused expression.
- Sometimes unable to answer questions.
- No slurred speech/facial droop/tingling sensation/visual problems.
- Denied recent stress.
- Weight loss ?amount.
- Anorexia.
- No dysphagia.
- Had felt a little hot of late ?weather (afebrile).

PMHx

- Asthma.
- Hypothyroidism.
- +ve for intrinsic factor antibodies.
- Cavernoma in left medial parietal lobe (stable).

O/E

- Chest clear.
- HS I + II + 0.
- Abdo SNT.
- Neuro...NAD.
- AMS 7/10 (Queen, 20-1, Year of WW2).
- No urine dip.
- Vitiligo.

Observations

- EWS 0
- Heart rate 89bpm
- 115/74
- 36.7
- RR 16
- O2 100% on RA

Bloods

- WCC 12.49
- B12 WNL (281)
- Folate WNL (13.9)
- CRP1.7
- UE (WNL)
- Lab glucose 6.9

- CXR – NAD.
- Urine culture * 4 – NAD.
- Blood culture – no growth after five days.

Post-Take Impression

- R/O hypocortisolaemia (10am cortisol 379).
- R/O intracranial event.
- Confusion ?cause.

- CTB:

- Mucosal thickening noted in-keeping with sinus disease.
- 3.5mm cavernoma on previous MR was not seen on CT.

Endocrine Team

- Differential
 - ?Encephalitis
 - ?Primary MH disorder

Neurology Round 1

- ‘Many thanks for seeing this 55 year old lady presenting to us with a two week history of brain fog...’
- ...
- **Differential**
 - ?Infective encephalitis.
 - ?Autoimmune encephalitis.
 - ?Primary mental health disorder.

Neurology Round 1

- Aciclovir (2/52 course).
- MRB.
- LP.
- EEG.
- HIV/Syphilis/Hepatitis bloods.
- TPO Antibodies.

Plan

- Aciclovir (2/52 course).
- MRB
 - No acute intracranial abnormalities, but microhaemorrhage seen in the subcortical white matter of the left parietal lobe.
 - Correlate clinically.
- LP (5 days).
 - Glucose 3.6
 - Lactate 1.6
 - Protein 0.24
 - Xanthochromia – not suggestive of SAH
 - Culture – champagne tap, no organisms seen.
- EEG.
 - Recording within normal limits.
- HIV/Syphilis/Hepatitis bloods
 - All negative
- TPO Antibodies.
 - 115 - positive

Neurology Round 1.5

- Plan

- Exclude teratoma.
 - » Pelvic USS – first attempt failed due to under-filled bladder and retroverted uterus.
 - » Transvaginal ultrasound scan...normal.
- Two more LPs.

Neurology Round 2.

- No need for three LPs (hurrah!)
- Run CSF for viral PCR.
- Send CSF sample for:
 - » NMDA receptor antibodies (19 days - with active chasing).
 - » VGKC (25 days and counting).
 - » AMPAR (25 days and counting).
 - » GABA (25 days and counting).
- But where do we get extra CSF from??
- If negative – refer to psychiatry.

Search

Consolidated Medication List



Search Options

csf

Procedure / Order Set Name ▲	Search Type	Therapeutic Drug Class
CSF (Cerebral Spinal Fluid Culture)	Procedure	
CSF 3 Methyl Dopa	Procedure	
CSF Amino Acid (quantitative)	Procedure	
CSF Angiotensin Converting Enzyme	Procedure	
CSF for HSWZ/Ent PCR	Procedure	
CSF Glucose	Procedure	
CSF Lactate	Procedure	
CSF Neuronal Antibodies	Procedure	
CSF Neurotransmitter Metabolites	Procedure	
CSF NMDA Antibodies	Procedure	
CSF Oligoclonal Protein Bands	Procedure	
CSF Protein	Procedure	
CSF Pterins	Procedure	
CSF Specimen Stored	Procedure	
CSF Xanthochromia	Procedure	
Potassium Channel Antibodies (CSF)	Procedure	

NMDA Receptor Antibodies

- Target - GluN1 subunit of the N-methyl D-aspartate receptors.
- Associated with autoimmune encephalitis.
- Circa 50% of cases are associated with underlying tumours, most commonly ovarian teratomas.
- 80% of those affected are female, typically when <45 years of age.

Further Specialist Tests For Autoimmune Encephalitis

- VGKC antibodies – voltage-gated potassium channels – little is known about their exact role in limbic encephalitis.
- AMPAR antibodies – α -amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid receptor antibody.
- American Academy of Neurology state it is paraneoplastic in 64% of cases.
- GABA - γ -Aminobutyric acid – known to be associated with malignancy.

Psychiatry Round 1

- ‘You haven’t excluded all of the medical causes...’.

Psychiatry Round 1

- Paraphrase – ‘We have been advised the CSF tests in Oxford take 4-5 weeks to come back. The Patient is periodically becoming very agitated, requiring 5 staff members for restraint. What do you propose for this for the next month?’
- ‘Lorazepam’.

A long time later....

- NMDA receptor antibodies – negative.
- VGKC, AMPA, GABA – outstanding.

Psychiatry Round 2

- Discharge Patient and we will make a mental health bed available for her and admit her from the community.

- Length of stay – 1 month.
- Investigations
 - Bloods
 - CXR
 - CTB
 - MRB
 - LP
 - EEG
 - Pelvis USS
 - Transvaginal USS

Discharged

