

Presentation A 39-year-old female with a history of migraines, presented with acute onset right neck pain, headache and right-sided paraesthesia of the arm and leg after rapid rotation of the neck to the left. Due to a headache similar to her usual migraine, the patient took Rizatriptan prior to presentation. Neurological examination revealed findings, including right-sided upper and lower limb paraesthesia, weakness and dysmetria, consistent with right hemi-cord infarction. CT angiogram of the neck and brain revealed a small calibre right vertebral artery of unclear aetiology. Subsequent MRA revealed a hypoplastic right vertebral artery with dissection causing a high cervical right hemi-cord infarction. The patient's right sided paraesthesia and weakness slowly improved over three months with medical therapy and rehabilitation, however some deficits remain, which affect her quality of life.

Conclusion This unusual case is a poignant reminder to carefully consider alternative diagnoses that may mimic migraines, especially when neurological signs and symptoms are present. Such differential diagnoses, such as vertebral artery dissection and spinal cord infarction, are of particular importance to consider, even in young patients without any risk factors, given that they can cause significant disability which may impact on quality of life.²

REFERENCES

- Hsu J, Cheng M, Liao M, Hsu H, Weng Y, Chang K, et al. The etiologies and prognosis associated with spinal cord infarction. *Annals of Clinical and Translational Neurology* 2019;6(8):1456–1464.
- Hsu C, Cheng C, Lee J, Lee M, Huang Y, Wu C, et al. Clinical features and outcomes of spinal cord infarction following vertebral artery dissection: a systematic review of the literature. *Neurological Research* 2013;35(7):676–683.

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DOUBLE TROUBLE: PAPILLOEDEMA SECONDARY TO IDIOPATHIC INTRACRANIAL HYPERTENSION AND APLASTIC ANAEMIA

¹Antonia Clarke, ²Charles Shuttleworth, ³Rachael Rodgers, ¹Justine Wang. ¹*Neurology, St George Hospital, Kogarah, NSW, Australia*; ²*Haematology, St George Hospital, Kogarah, NSW, Australia*; ³*Obstetrics and Gynaecology, Royal Hospital for Women, Randwick, NSW, Australia*

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Objective We report the case of a 34-year-old female diagnosed concurrently with idiopathic intracranial hypertension (IIH) and aplastic anaemia.

Case A 34-year-old female with recent weight gain presented with headache and fatigue. Clinical examination revealed conjunctival pallor and occasional bruising, with fundoscopy and optic coherence tomography demonstrating bilateral papilloedema (grade III). There were enlarged blind spots bilaterally. The cerebrospinal fluid (CSF) opening pressure was greater than 30 cmH₂O. An MRI brain was normal and there was no venous sinus thrombosis. A diagnosis of IIH was made, and she was treated with therapeutic removal of CSF, acetazolamide and weight loss strategies. Concurrently, a bone marrow biopsy to investigate profound pancytopenia was consistent with aplastic anaemia. The patient had worsening IIH features during fertility preservation treatment in preparation for stem cell transplant. At five months, there was complete resolution of subretinal fluid and clinical papilloedema. Anti-thymocyte globulin and cyclosporine treatment was subsequently commenced.

Conclusion Previous case reports have emphasised the interplay between the pathophysiology of anaemia and IIH,¹ with treatment of aplastic anaemia contributing to resolution of IIH.^{2,3} We believe this is the first reported case of concomitant IIH and aplastic anaemia with resolution of papilloedema prior to treatment of anaemia. We also highlight the challenges of managing IIH during fertility and cyclosporine treatment.

REFERENCES

- Biossue V, et al. Anaemia and papilledema. *American Journal of Ophthalmology* 2003;135(4):437.
- Nazir SA, et al. Pseudotumor cerebri in idiopathic aplastic anemia. *Journal of AAPOS* 2003;7(1):71.
- Lilley ER, Bruggers CS, Pollock SC. Papilledema in a patient with aplastic anemia. *Arch Ophthalmol* 1990;108:1674–5.

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IMPACT OF TELEHEALTH ON MULTIPLE SCLEROSIS (MS) OUTPATIENT CLINICS DURING THE COVID-19 PANDEMIC

Vivien Li, Ai-Lan Nguyen, Izanne Roos, Katherine Buzzard, Chris Dwyer, Mark Marriott, Mastura Monif, Charles Malpas, Stefanie Roberts, Lisa Taylor, Elizabeth Carle, Nicola Taylor, Kelsey Tunnell, Trevor Kilpatrick, Tomas Kalincik. *Neurology, Royal Melbourne Hospital, Parkville, VIC, Australia*

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Objectives

- Characterise telehealth use in MS clinics during the COVID-19 pandemic.
- Assess patient and clinician attitudes towards telehealth.
- Compare telehealth-based and physical EDSS obtained during period of telehealth implementation.

Methods Clinic records from Mar-Dec 2020 were reviewed. Patients and clinicians completed questionnaires about experiences using Telehealth. The iMed database was searched for EDSS recorded via face-to-face and telehealth appointments during and compared to face-to-face EDSS preceding and following the study period. T-test and Chi-square test were used for between-group comparisons.

Results 2023 appointments (27% face-to-face, 35% video, 37% telephone) were conducted. New referrals were predominantly face-to-face (66%).

89% of patients were satisfied with telehealth. 58% felt they were as good as face-to-face visits, whilst only 11% of clinicians agreed. Many patients favoured a hybrid model. Safety during the COVID-19 pandemic was important to both groups.

EDSS increase from the preceding visit was recorded in a significantly higher proportion of face-to-face than telehealth appointments ($p=0.027$), with the increase driven by patients with baseline EDSS ≤ 4.0 . Amongst patients with EDSS increases, similar numbers of suspected relapses were seen via both modalities. Absolute increase in EDSS was also significantly greater amongst patients seen face-to-face ($p<0.0001$). There was no significant difference in EDSS change at subsequent follow-up in patients with consecutive face-to-face versus intervening telehealth appointments.

Conclusion Patient satisfaction with telehealth was high, whilst clinicians preferred face-to-face consultations. EDSS increase was more frequently recorded via face-to-face than telehealth

appointments, which may underestimate lower EDSS. Future clinics could combine both modalities.

073 HEADACHES OF RAISED INTRACRANIAL PRESSURE AS A PRESENTING FEATURE OF MALIGNANT INFILTRATION IN THE CAUDA EQUINA

¹Matthew Silsby, ²Andrew Martin, ³Winnie Varikatt, ¹Steve Vucic, ¹Victor SC Fung, ¹Parvathi Menon. ¹Neurology, Westmead Hospital, Westmead, NSW, Australia; ²Neurology, Blacktown Hospital, Blacktown, NSW, Australia; ³Anatomical Pathology, Westmead Hospital, Westmead, NSW, Australia

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Introduction Raised intracranial pressure (ICP) headache is rarely caused by spinal cord lesions. We present two patients with rare presentations of uncommon malignancies surrounding the cauda equina resulting in raised ICP headache.

Cases Patient 1, a 54-year-old man, presented with two months of headache, blurred vision and 9kg weight loss. Fundoscopy revealed papilloedema. Shortly after presentation he developed lower limb weakness with absent tendon reflexes. MRI brain was unremarkable. MRI spine showed diffuse nerve root thickening and effacement of the CSF spaces around the cauda equina. Patient 2, a 51-year-old man, presented with four months of headache and blurred vision, progressive lower limb weakness and 20kg weight loss over 12 months. MRI brain showed two small lesions insufficient to cause raised ICP. MRI spine showed extensive lower spinal cord infiltration with diffuse thickening of the cauda equina. Pathological assessments revealed malignant histiocytosis in patient 1 and primary leptomeningeal gliomatosis in patient 2.

Discussion These cases demonstrate the rare presentation of raised ICP headache resulting from spinal lesions. In both cases the original presentation with raised ICP headache and absent lower limb signs led to diagnostic delay. Malignant lesions in the spinal column can increase ICP, though the mechanism is debated. These cases emphasise the importance of a broader search for the aetiology of raised ICP headache in the absence of a causative lesion on primary brain imaging. Further, these cases highlight rare presentations of two uncommon pathological entities.

074 CEFTRIAXONE THERAPY FOR ADULT ALEXANDER DISEASE: REPORT OF 2 CASES

¹Natalie C Palavra, ^{2,3}Omar Ahmad. ¹Department of Neurology, Royal North Shore Hospital, Northern Sydney Local Health District, St Leonards, NSW, Australia; ²Department of Neurology, Sydney Adventist Hospital, Wahroonga, NSW, Australia; ³Department of Neurology, Hornsby Ku-Ring-Gai Hospital, Northern Sydney Local Health District, Hornsby, NSW, Australia

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Objectives Adult onset Alexander Disease (AxD) is a rare leukodystrophy for which there is currently no treatment. Ceftriaxone has been proposed as a potential treatment for AxD. Here we report the clinical outcome of an extended course of intravenous cyclical ceftriaxone therapy in two patients with AxD.

Methods Case 1 is a 64 year old female with a five year history of progressive gait disturbance, bulbar palsy and horizontal diplopia. Case 2 is an 80 year old male with a two-year history of bulbar palsy and gait disturbance. Both cases were confirmed to have AxD and received intravenous ceftriaxone 2g daily for three weeks per month during the initial four months, then for 15 days monthly thereafter. Patients were assessed at baseline and approximately 4-month intervals using the Kurtzke Expanded Disability Status Scale, Modified Ranking Scale, and neurological examination.

Results Both cases displayed functional decline on ceftriaxone therapy, as assessed by outcome measures of disability. Progression on neuroimaging was also observed on MRI brain for both patients.

Conclusions These results suggest that ceftriaxone for AxD may not prevent functional decline. Caution should be applied before suggesting ceftriaxone for the management of AxD.

075 GADOLINIUM ENCEPHALOPATHY PRESENTING AS STATUS EPILEPTICUS FOLLOWING INTRATHECAL INJECTION

¹Emily Sutherland, ¹Jonathan Baird-Gunning, ¹Laura Rudaks, ¹Natalie Palavra, ^{1,2}Michal Lubomski, ¹Martin Krause. ¹Department of Neurology, Royal North Shore Hospital, St Leonards, NSW, Australia; ²Neurological Sciences, Prince of Wales Hospital, Randwick, NSW, Australia

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Objectives Intra-thecal gadolinium is an alternative contrast agent for computed tomography myelograms. Uncommonly it can cause gadolinium encephalopathy which can present with an array of neurological signs and symptoms.

Methods Review of a case shared by interventional radiology, emergency, neurology and intensive care. This case describes the symptomatology, investigations, and treatment for gadolinium encephalopathy, alongside recommended dosages for intrathecal administration.

Results An 85 year-old female with an allergy to intra-venous iodine presented for a computed tomography myelogram for investigation of bilateral lower limb pain. During the myelogram 8mL of intrathecal gadolinium (Gadovist 1.0) equivalent to 8mmol of gadobuterol was injected in light of the iodine allergy. Ten minutes after completion of the procedure the patient had abrupt onset pelvic pain, nausea, and bilateral lower limb paraesthesiae, which was treated as an allergic reaction with an anti-emetic, analgesia, and steroids. Rapid deterioration followed with extreme agitation and subsequent convulsive status epilepticus. After intubation and treatment with anti-epileptic medication an EEG showed persistent non-convulsive status epilepticus. Intra-venous steroids were introduced, alongside two more anti-epileptics. She was extubated on day 7, and EEG normalised by day 24. The patient was discharged to a rehabilitation hospital with moderate residual cognitive impairments.

Conclusion This case outlines a recognised but infrequently reported response to intrathecal gadolinium. Guidelines for safe intrathecal injection are yet to be identified, as are specific treatment options.