Aims ULH commenced trust-wide epilepsy clinics in January 2020. Formerly lacking an infrastructure for epilepsy service, accurate data regarding workload and patient characteristics were unavailable. A detailed database was created for meaningful quantification of service needs,¹ ² risk assessment, outcome measurement and to develop pathways towards a complete service.²

Methods

Population 308 patients referred to epilepsy clinic in ULH were included in the database (Referral criteria: patients aged less than 2, focal seizures, unresponsive to medications, diagnostic difficulties)

Method Demographic data, diagnosis of epilepsy as per ILAE classification (2017), aetiology, information about treatment, follow up in tertiary centres (under Paediatric neurologists or epilepsy surgery centre), input by epilepsy nurses, co morbidities community paediatric and CAMHS support were collected for each patient and incorporated into a data base of alphabetical order.

Results Age groups <2 years, 2-16 years and >16 years had 29, 255 and 24 patients respectively. 114 (37%) patients have a confirmed syndromic diagnosis, 22 of them being epileptic encephalopathies. 79 patients have focal seizures as part of symptomatica, 5 have the confirmed diagnosis of NEAD.

29 patients have identified genetic aetiology (16 Chromosomal abnormalities, 13 single gene defects, 5 SCN1A mutations, 3 tuberous sclerosis). 66 patients have structural brain abnormalities (21 prematurity related brain damage, 14 hypoxic and 6 hypoglycemic, 7 CNS infection related brain injuries 2 term IVH, 8 strokes and 8 patients with brain malformations or cortical dysplasia.

119 patients (38%) were on 2 or more medications. 9 ketogenic diet, 7 have VNS and 20 patients evaluated in epilepsy surgical pathway. 114 (37%) patients are already followed up in a tertiary centre.

53 patients have diagnosis for autism, 24 with ADHD, 63 with leaning difficulties, 44 with developmental delay, further 29 with isolated motor or speech delay, and 10 with severe visual and/or hearing impairment. 114 (37%) had community paediatric input. Only 6 had CAMHS input. Despite many more patients reporting psychological symptoms, quantifying mental health need was difficult.

Conclusion

Outcome An interim pathway was developed based on this capacity and demand data. Epilepsy nursing team of 2 and neurology out reach clinics established. A long-term roadmap for a comprehensive epilepsy service including a community based nursing team and transition service are planned. The need for a standard screening tool to quantify mental health need was recognised.

Limitations Of the 800 epilepsy patients in Lincolnshire, only patients referred to epilepsy clinic are included and above statistics may not directly apply to the remaining 500 patients.

REFERENCES

1. NHS RightCare: Epilepsy Toolkit: Optimising a system for people living with epilepsy.
2. A UK survey of the experience of service provision for children and young people with epilepsy: Williams F et al; https://doi.org/10.1016/j.seizure.2018.06.007

Aims

Introduction Foot drop is due to the weakness in foot dorsiflexion. It’s mostly a lower motor neuron lesion and is commonly caused by common peroneal neuropathy or L5 radiculopathy. The objective of this case report is to present an unusual cause of unilateral foot drop with upper motor neuron signs.

Methods

Case History A 14-year-old boy presented with an 11-month history of walking on his tip toes, over the last 5 months he lost control over his right foot, which flops down whilst walking. He also felt occasional pins and needles and cannot feel the ground with his right foot. There are no symptoms suggestive of raised intracranial tension. He has a haemangioma on the right upper fibula.

There is a strong family history of vascular malformations in the brain, with his mum, maternal grand mum, maternal uncle, and aunt affected.

Examination There is a possible very slight wasting of the right calf, no fasciculation’s, with normal tone on both lower limbs. Bilateral knee and ankle reflexes are exaggerated with the right side greater than the left. Bilateral plantar’s were upgoing. There is impaired dorsiflexion of the right foot with a high stepping gait on the right side. There is reduced sensation on the right foot dorsum for fine touch. He has bilateral pes-cavus. The spine was normal. The rest of his neurologic examination is normal.

Results

MRI Head showed Left parietal 3.57x2.7 cm and right frontal deep white matter 1.36x1 cm cavernomas with subacute haemorrhage which are amenable to resection and he is awaiting neurosurgery.

Conclusion

Discussion Foot drop is mostly Lower motoneuron and commonly caused by L5 radiculopathy or neuropathy of the common peroneal nerve.

L5 radiculopathy: Patients have low back pain radiating down the leg, associated with sensory deficits over the dorsum of the foot, buttocks, lateral thigh, and calf and weakness of foot eversion, inversion and dorsiflexion, and great toe extension.

Common peroneal nerve neuropathy: Is due to the compression of the nerve at the lateral upper fibula and is associated with paraesthesias and sensory loss over the dorsum of the foot. Foot inversion and plantar flexion (tibial nerve) are normal, and the reflexes are preserved. The diagnosis can be confirmed with electromyography and nerve conduction studies. These are usually short transient episodes.