



2019

Case Studies

1. A case of Bilateral Thalamic Infarct: A reminder of the Artery of Percheron

Dr. Femi Adeoye MBBS, Dr. Syed Abid Raza MBBS, Dr. Phil Jones FRCP
Bronglais Hospital
Hywel Dda University Health Board

Introduction

Bilateral thalamic infarctions are uncommon due to the nature of vascular anatomy. In rare cases, the artery of Percheron provides a common arterial stem for the two thalami. Occlusion of this artery leads to bilateral thalamic infarction with resultant neurophysiological deficits.

Method

We examine a case of an 87-year old gentleman with medical background of Bronchial Asthma, Previous Elective Aortic Valve Replacement, Paroxysmal Atrial Fibrillation (On Warfarin), and TIA. He was brought into the hospital by the Paramedics on account of left facial droop, dysarthria, left-sided weakness and altered level of consciousness.

Results

CT Head showed evidence of lacunar infarction in both thalami with moderate to severe degree of periventricular micro-angiopathic changes and age-related cortical atrophy in both cerebral hemispheres.

Discussion

In this article, we examine a case of bilateral thalamic infarction in an elderly patient, presumably due to occlusion of the artery of Percheron, as a reminder of this rare anatomical variation.

2. Case Report: Sudden Partial Visual field Loss in a gentleman following forceful neck manipulation. We contacted local chiropractors, regarding their awareness of the potential risks and the role of consent for procedures such as forceful neck manipulation where complications may lead to significant health consequences.

Sarah Goodison; Subi Nagasayi; Louise Coombe.
Withybush General Hospital
Hywel Dda University Health Board

Introduction

We present a 68 year-old gentleman referred from ophthalmology, reporting visual field loss and poor coordination following cervical manipulation with a chiropractor. Clinical examination revealed a superior quadrant defect affecting the right eye only. An MRI Brain demonstrated no acute ischemia or posterior pathology, but carotid doppler revealed severe(90%) left IC stenosis. Our impression, was that he had likely suffered a retinal artery embolus, possibly a cholesterol plaque, leading to a TIA. Vascular risk factors included hypertension, hyperlipidemia and smoking. Stroke, TIA and ophthalmological injury following neck manipulation has been well described. We wanted to focus on the role of screening for risk factors and consent amongst chiropractors, where complications of such a procedure may lead to significant health consequences.

Method

We contacted local chiropractors regarding their awareness of risks of stroke and their own practice concerning consent for procedures, and the General Osteopathic Council (GOC) about current guidance.

Results

The GOC referenced their 'Osteopathic Practice Standards' recommending that osteopaths inform patients of the anticipated benefits, as well as any material or significant risks associated with the treatment proposed, and confirm their understanding of these. They also require up-to-date knowledge around consent through CPD training. Only 1 local chiropractor responded, but declined to participate.

Discussion

Unfortunately, it is difficult to form any convincing support of current practice and advice amongst local chiropractors. However, this case allowed us to raise awareness with respects to the role of consent for such procedures and medical knowledge that could guide identifying those at greater risk of complications.

3. A Tale of Two Faces

Harriet White, Diptarup Mukhopadhyay, Harish Bhat
Princess of Wales Hospital
Cwm Taf Morgannwg University Health Board

Introduction

This case series compares two cases presenting with very similar symptoms. The first, a 45 year old man presenting with right sided facial droop and right neck pain with an unremarkable CT. The second, a 71 year old presenting with right sided facial droop and mild left arm weakness. Again, an unremarkable CT. Using these cases as examples, this case series will discuss the defining features, similarities, and important clinical differences between two very similar presentations; Bell's palsy and a pontine infarction.

Method

A prospective case series study of Lower Motor Neurone (LMN)-type facial weakness presenting to an Acute Stroke Unit in a District General Hospital.

Results

In the first case the LMN-type facial nerve weakness was due to Bell's palsy, a common and well recognised cause. In the other case the LMN-type facial nerve weakness was due to a pontine infarction.

Discussion

When considering UMN versus LMN facial nerve palsies, it is widely accepted that a cerebral event will result in forehead sparing due to bilateral forehead innervation. However, in the case of a pontine infarct, the facial nerve nucleus and proximal facial nerve tract can be affected resulting in a LMN palsy, a Bell's palsy mimic. The presence of additional neurology, as well as knowledge of the facial nerves functions can help to localise a lesion and differentiate between these diagnoses. This is of clinical relevance as it encourages consideration, early recognition and appropriate treatment of pontine infarcts in LMN facial nerve palsy presentations.

4. Stroke like syndrome in a 60 year old lady

Dr Walee Sayed, Dr Rebecca Woodside
Wrexham Maelor Hospital
Betsi Cadwaladr University Health Board

Introduction

This is a case of 60 year old lady who presented as stroke and was diagnosed as MELAS

Method

Case report

Results

She presented with sudden onset of right side weakness, expressive dysphasia and headache. She also has been losing weight in the last few months. She had a short stature and difficulty in hearing since childhood. In her 30s she developed problem with her vision which was treated as possible Chorioretinitis. She was diagnosed with diabetes mellitus (possible type 2) when she was in her 40s. She was started on Metformin but she did not tolerate higher doses of the drug therefore treatment with Gliclazide was commenced. Her CT brain scan demonstrated an area of acute of infarction in the left MCA territory. During admission she developed a visual field defect which was originally treated as a possible posterior circulation stroke. A repeat CT brain scan demonstrated as Subacute infarction in the left parieto-temporo-occipital lobes. She was further evaluated with an MRI Scan of the brain which showed restricted diffusion in the left hemisphere which did not respect the vascular territory boundaries. Following review by a neurologist the possibility of Seizures and MELAS (Mitochondrial Encephalopathy, Lactic acidosis, and Stroke-like episodes) was raised. She had a lumbar puncture and the CSF revealed raised level of Lactate. She subsequently had Genetic testing confirmed a Mitochondrial DNA mutation which was consistent with MELAS. During her admission Metformin was stopped and she received nutritional support and rehabilitation and was discharged home.

Discussion

MELAS should be considered in stroke patients with accompanied other features such as this case.