HEAD & NECK / NEURO

P018 How quickly are we scanning our traumatic head injury patients at A&E?

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Background: Traumatic head injury is one of the most common causes of death and disability in the UK for the 1 to 40 years age group with an annual emergency attendance of 1.4 million and 200,000 admissions[1]. CT head is the key primary imaging modality for prompt detection and timely intervention. There are NICE guidelines to assess local practice in terms of the time taken from CT head request to scan, time from scan to delivery of provisional radiology report and the indication for the scan. However, there has been no prior audit at our department.
Method: Retrospective analysis of a month's data of all patients with CT head was performed at the emergency department in a tertiary teaching hospital. The time taken for an emergency patient to be scanned, the time taken for a provisional CT head radiology report to be completed and the details of the CT head request were collected and evaluated.
Results: Results showed that 80.7% of patients had CT head scans within the time required; 66.3% of radiology reports were authorised within 1 hour; and 83.9% of the A&E requests had clear documentation of head injury risk factors. It was identified that most suboptimal results took place out-of-hours or during the weekends.
Conclusion: The results highlighted the poor level of radiology staffing during out-of-hours and weekends as a key issue in delivering optimal patient care. This concern will be investigated and a re-audit will be performed to assess the compliance.

1. National Institute for Health and Clinical Excellence. CG176. Head Injury: assessment and early management. London. January 2014. https://www.nice.org.uk/guidance/cg176.

P019 A guide to vocal cord palsy for general radiologists

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[1]Plymouth Hospitals NHS Trust; [2]Royal Cornwall Hospitals NHS Trust

The vocal cords are innervated by the recurrent laryngeal nerves and play a major role in phonation. Vocal cord paralysis may be the first presenting feature of serious pathology and often manifests clinically with voice hoarseness (Paquette et al, 2012). Nevertheless, up to 40% of patients with a vocal cord palsy may be asymptomatic and it is therefore crucial for radiologists to recognise the imaging appearances of vocal cord paresis (Dankbaar and Pameijer, 2014). A vocal cord palsy can be caused by a variety of neoplastic, inflammatory and vascular disease processes. Awareness of the range of pathologies and inclusion of the entire course of each recurrent laryngeal nerve within the imaging field (to aortopulmonary window for left and to brachiocephalic artery for right) are essential (Dankbaar and Pameijer, 2014). This poster focuses on the imaging features of a vocal cord palsy, the anatomy and course of the recurrent laryngeal nerves and highlights a number of common and important causes of vocal cord paresis.

1. Dankbaar, J.W. Pameijer, F.A. (2014). Vocal cord paralysis: anatomy, imaging and pathology. *Imaging Insights*. 5:743-751.
2. Paquette, C.M. Manos, D.C. Psooy, B.J. (2012). Unilateral vocal cord paralysis: a review of CT findings, mediastinal causes, and the course of the recurrent laryngeal nerves. *Radiographics*. 32(3):722-741.

P020 A 2-year retrospective analysis of the diagnostic performance of Core Needle Biopsy (CNB) versus Fine Needle Aspiration Cytology (FNAC) in the evaluation of parotid gland lesions

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University College London Hospitals NHS Foundation Trust

Purpose: Comparison of the relative diagnostic performance of FNAC and CNB in parotid gland (PG) lesions. **Methods:** Data from FNAC and CNB performed over a 2-year period were reviewed. Samples were included if the clinico-radiological suspicion was of a PG neoplasm. Biopsies of lesions arising outside the PG, metastases and microbiological aspirations were excluded as were recurrent pleomorphic adenomas. For excised lesions, final histopathology was assessed for concordance with the biopsy samples.
Results: 183 biopsies: 154 FNAC, 77 CNB. Of 154 FNAC, 27 were inadequate (82% adequacy rate), 85 yielded a cytological diagnosis (67% diagnostic rate) and 48 subsequently underwent CNB. From 76 CNB, 74 samples were adequate for diagnosis (97%), 61 yielded a histopathological diagnosis (80%). Of 12 inadequate FNAC who had a CNB, 10 (83%) were diagnostic. In 68 of 183 patients, final excision histopathology was obtained: 82% FNA concordance, 92% CNB concordance. FNA sensitivity for malignancy 60.0% (95% CI: 14.66%-94.73%), FNA specificity 90.2% (95% CI: 76.87-97.28%). CNB sensitivity 100.00% (95% CI: 73.54%-100.00%), specificity 93.75% (95% CI: 69.77%-99.84%). No complications.
Conclusion: CNB demonstrates superior performance with regard to sensitivity, specificity and histopathological concordance compared to FNA, with no complications in our study. This study is in line with published studies in this field suggesting preferential use of CNB over FNA may be warranted in the evaluation of primary PG lesions.

P021 **Cone beam CT for 3D sialograms**

Alexandros Leontaritis; Daria Cupurdija; Veronique Sauret-Jackson
Cavendish Imaging Ltd

In order to understand the diagnostic potential of Cone Beam CT (CBCT) sialograms, a retrospective radiology report investigation was conducted and case studies chosen to illustrate the CBCT capability for salivary gland exploration and give practical guidance on this new imaging technique to the radiography team. Referring criteria: questioning blocked duct, understanding the 3D location the duct system and anomalies in parotid and submandibular glands. Imaging: J Morita Accuitomo F170, unilateral parotid (9) and submandibular (3) CBCT scans. Radiation dose: 1310 mGy.cm2 DAP for 8cm-diameter x 8cm-height cylindrical FOV. Findings: The isotropic dimension of the voxels (0.160mm resolution in x, y and z) and the contrast used (Omnipaque 300) allow pictorial 3D description and precise measurements of the extraglandular, intraglandular and accessory ducts, ductal stricture, saccular dilations, salivary cavities, filling defects and scarring of mural debris. Incidental findings included complex retained roots of wisdom teeth, periodontal disease and degenerative changes in the TMJ. For the radiographer, this study is extremely useful to illustrate the importance of careful positioning of the 8cmx8cm FOV using 2 orthogonal scout images because this was critical to image the exact shape of the whole duct system and encompass anomalies.

P022 **Haemorrhagic vestibular schwannoma: A case study**

Sidharth Praveen; Ashwin Algudkar; Nicola Lyle; Clive Vandervelde
Basingstoke and North Hampshire Hospital

Case presentation: A 41-year-old male presented to the emergency department with sudden onset headache and left-sided facial weakness. Unenhanced CT head showed an area of haemorrhage at the left cerebellopontine angle measuring 2.4 cm with the suspicion of adjacent soft tissue (Figure 1). A subsequently performed post-contrast MRI brain revealed enhancing soft tissue at the anterolateral aspect of the haematoma extending into the left internal auditory meatus consistent with a haemorrhagic vestibular schwannoma (Figure 2). The vestibular schwannoma was excised three months after initial presentation by a trans-labyrinthine approach with near-complete excision leaving only a few mm of tumour capsule attached to the facial nerve. Three-and-a-half years post-surgery the patient is well with no evidence of recurrent or residual disease demonstrated on two interval MRI scans (Figures 3,4).

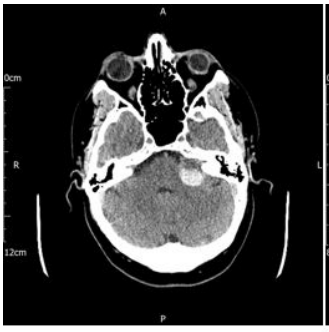


Figure 1

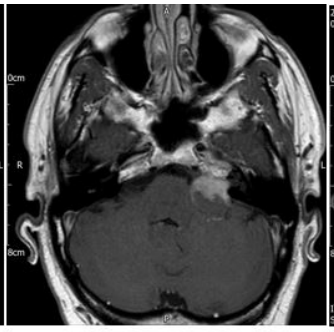
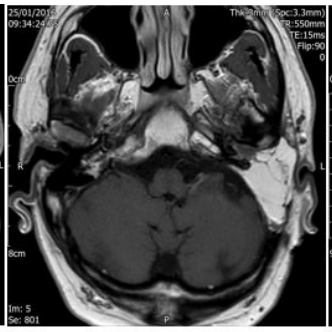


Figure 2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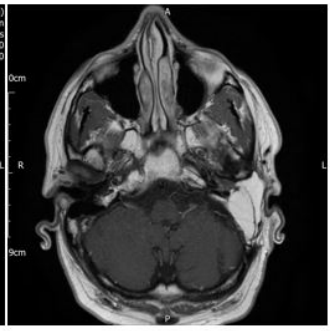
Figure 4

Discussion: Vestibular schwannomas are benign neoplasms of the vestibulocochlear nerve which commonly arise from the superior vestibular portion of the nerve. They account for 8-10% of all intracranial tumours and approximately 75% of cerebellopontine angle tumours (1). Intracranial haemorrhage occurs in approximately 11% of all brain tumours but haemorrhage associated with vestibular schwannomas occur in <1% of cases (2). Facial nerve palsy occurs in 31.3% of haemorrhagic vestibular schwannoma cases compared to 6% of non-haemorrhagic cases (3). Certain tumour characteristics such as hypervascularity, dilated thin vessels, cystic nature, rapid growth and large size can increased the risk of haemorrhage in vestibular schwannoma (3). Most cases of haemorrhagic vestibular schwannoma undergo surgical management, with a good prognosis overall (2).

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3. Niknafs, Y., Wang, A., Than, K., Etame, A., Thompson, B. and Sullivan, S. (2014). Hemorrhagic Vestibular Schwannoma: Review of the Literature. World Neurosurgery, 82(5), pp.751-756.

P023 Accuracy of FNA neck and radio-pathological correlation of BTA thyroid nodule classification

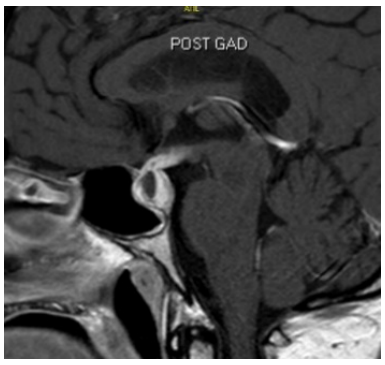
Ahmed Al-Tweel; Sarah La'Porte
Milton Keynes University Hospital

Background: Lumps in the neck are common, and US guided FNA is an easy way to confirm or exclude pathology.
Objectives: To see if there is a change in adequacy rates for FNA, and more specifically thyroid FNA, following a change in practice in 2014 (publication of BTA guidance), and to compare the FNA thyroid nodule BTA classification with cytology/ histopathology.
Standards: The US guided FNA neck samples must be satisfactory for cytological diagnosis in 80%. The US guided FNA thyroid samples must be satisfactory in 70% (RCR).
Method: A retrospective study was conducted of all patients who had US guided FNA neck performed by a single operator in Milton Keynes University Hospital from August 2017 - July 2019. Data collected from the PACS and ICE systems. Results of the FNA were compared with cytology/histopathology to assess the adequacy.
Results: 94% of the samples obtained from neck lumps and 89% of samples from thyroid nodules were satisfactory for cytological diagnosis. There was a significant decrease in the number of thyroid FNAs following publication of BTA guidelines, and an increase in thyroid FNA adequacy rates (89% in 2017-19 compared with 71% pre-2014). 100% of U5 nodules, 44% of U4 nodules and 12 % of U3 nodules were malignant.
Conclusion: Discuss the results in the radiology department, share audit findings with Thyroid MDT and continue using BTA guidelines. Re-audit in July 2020.

P024 Pictorial review of MRI brain findings: Hypophysitis

May Ting Tan; Steven Yong Keen Hor; Joseph Alex; Deepak Pai; Hussein Hassan
Northern Lincolnshire and Goole NHS Foundation Trust

Background: A 56-year-old lady who presented with 6-8 weeks history of frontal headache with nausea and multiple episodes of vomiting up to 16 times/day, photophobia, double vision and an episode of transient loss of consciousness for 15 seconds. No history of trauma. On examination, all cranial nerves were intact, no obvious weakness in either upper or lower limbs, no cerebellar signs. CT head was done which showed enlargement of the pituitary gland and stalk. MRI confirmed pituitary macroadenoma with extensive suprasellar extension into the hypothalamic region.



Learning Points: Hypophysitis, is characterised by inflammation of the pituitary gland, usually resulting in hypopituitarism[1]. The most common symptoms of hypophysitis is headache and visual loss. Patients may also develop symptoms of signs of endocrine insufficiencies such as diabetes insipidus, hypothyroidism and growth hormone deficiency. In primary hypophysitis, the idiopathic inflammatory process is confined to the gland while secondary forms are caused by definitive aetiology such as drugs or systemic diseases[2]. Investigations of patients with hypophysitis include baseline bloods, early morning pituitary-related hormone profile, imaging, immunology profile and biopsy. Pituitary MRI is the preferred radiological choice of investigation. MRI findings may show homogenously enhancing pituitary gland, absence of posterior pituitary bright spot, diffuse enlargement of gland or dural thickening[3]. Various treatment for hypophysitis such as immunosuppressive agent, surgery, radiotherapy and conservative options are available. Management of hypophysitis is mainly aimed at treating pituitary hormone deficiencies according to recommendations and to reduce inflammation or enlargement of the gland[1].

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2. Prete A. and Salvatori R., 2018 Hypophysitis. In: Feingold KR, Anawalt B, Boyce A, et al., editors. Endotext [Internet]. South Dartmouth (MA): MDText.com, Inc.; 2000.
3. Faje, A., 2016. Hypophysitis: Evaluation and Management. Clinical Diabetes and Endocrinology, 2(1).

P025 Peripheral nerve imaging for the general radiologist: Don't be scared

John Morlese[1]; Sarah Yusuf[1]; Santhi George[1]; Atique Imam[2]
[1]Sandwell and West Birmingham NHS Trust; [2]Great Western Hospitals NHS Foundation Trust

Background: Abnormalities of peripheral nerves are well recognized by MSK and neuroradiologists. Peripheral nerve abnormalities will present on scans reported by general radiologists. Therefore, a good understanding of the appearances of normal and abnormal peripheral nerves is required. Peripheral nerves can be evaluated by ultrasound and MRI. Standard MR neurography techniques have been employed both at 1.5 and 3T and, in addition, newer more advanced techniques such as diffusion tensor imaging have been used. An understanding of the appropriate MR technique to evaluate peripheral nerves is

needed. In addition, knowledge of the different pathologies that can affect the peripheral nerves with their imaging features is required.
Purpose: Discuss the imaging techniques used to evaluate peripheral nerves including DTI and demonstrate the important causes of abnormal peripheral nerves.
Summary: We aim to give a detailed description of the conditions that affect the peripheral nerves. We will highlight the important imaging features that differentiate these different causes. We will describe an imaging protocol that can be used when peripheral nerve conditions are suspected by referring clinicians.

P026 **Evaluating the application of structural MRI neuroimaging and machine classification in the diagnosis of first-episode psychosis**

Emma Rose; Stuart MacKay
University of Liverpool

Background: Current NICE Guidelines[1] do not recommend MRI Neuroimaging in the diagnosis of first-episode psychosis (FEP), instead ICD-10 or DSM-IV criteria is used. However, psychiatric assessment is subjective, depending on the clinician, the setting and criteria applied.[2,3] Structural MRI neuroimaging is able to detect robust neuroanatomical biomarkers characteristic of FEP with high levels of accuracy; enlarged ventricles, [4,5] decreased hippocampal volume[6,7] and reduced grey matter. [8,9]
Method: A literature review was conducted to identify relevant literature reporting the sensitivity and specificity of both MRI Neuroimaging and Psychiatric Assessment in the diagnosis of First-Episode Psychosis. Scopus, Medline and PyscoINFO databases were searched from January 1999 to September 2019, with the findings discussed and data extracted.
Result: Psychiatric assessment gave a highly sensitive diagnosis of First-Episode Psychosis, (ranging from 0.51 - 0.87). However, few specificity values were reported, and those that were included were contradictory, decreasing the validity of research. Conversely, a diagnosis of FEP using MRI machine classification had high values of sensitivity (between 0.69-0.86) and high specificity (between 0.61-0.87).
Conclusion: Overall, MRI machine classification provided a more sensitive and significantly more specific diagnosis of FEP in comparison to psychiatric assessment. As machine classification diagnosis is based on quantitative neuroanatomical biomarkers this would overcome the subjectivity and interpretation bias associated with psychiatric assessment. Current reports state that machine-based classifiers are achieving accuracy levels of 75% - 95%,[10] which is promising for future application. However, a large-scale study into MRI machine classification analysis has not been performed.

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2. Del-Bem, C, Armanda C, Teixeira B, et al. 2010 Differential diagnosis of first-episode psychosis: importance of an optimal approach in psychiatric emergency 32;2.
3.Fusar-Poli, P, Cappucciati, M, Rutigliano, G et al, 2016 Diagnostic Stability of ICD/DSM First Episode Psychosis Diagnoses: Meta-analysis, Schizophrenia Bulletin, 42, 6 1395-1406.
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6.Nelson, M.D, Saykin, A.J. Flashman, L.A .et al. 1998 Hippocampal volume reduction in schizophrenia as assessed by magnetic resonance imaging. Gen Psychiatry, 55. 433-440.
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9. Job DE, Whalley HC, Johnstone EC, Lawrie SM. 12. Grey matter changes over time in high risk subjects developing schizophrenia. Neuroimage. 2005;25 4:1023-1030.
10. Brammer M. 2009 The role of neuroimaging in diagnosis and personalized medicine-current position and likely future directions. Dialogues in clinical neuroscience, 11;4 389-396.

P027 **Evaluating novel iterative reconstruction software on image quality for plain CT head scans**

Nicholas Wong
Nottingham University Hospitals NHS Trust

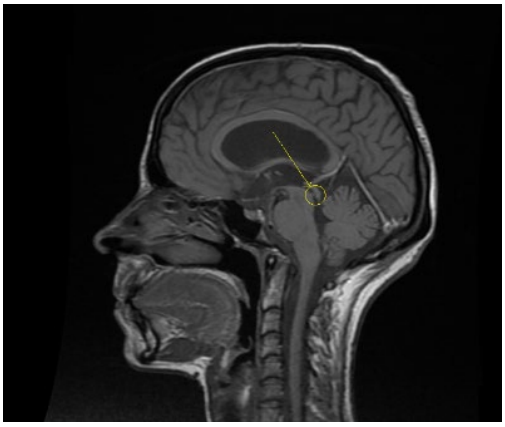
Background: New reconstruction methods within computed tomography (CT) claim to reduce the dose of diagnostic scans while maintaining image quality. Evaluating these claims is important to ensure that patients are receiving the best from their diagnostic imaging. Previous studies have shown the effectiveness of novel iterative reconstruction (IR) methods in dose optimisation on body scans. However there is little evidence for the effectiveness of newer IR methods when considering neurological examinations.
Method: For this project the dose parameters were kept constant with the method of IR being the independent variable. Image quality of the scans was measured by radiologist review via visual grading analysis and by Hounsfield units.

Results: The results from this project found that there was little significant difference in image quality between the older and newer reconstruction methods when applied to plain head scans. Previous studies found that with body scans there was a significant increase in image quality, it seems neurological examinations may not be as greatly affected.
Conclusion: When evaluating newer IR software it is important to weigh up its true efficacy and the impact on the department in regards to cost effectiveness, ensuring resources are used efficiently. The results show that there is no significant difference between older and newer IR methods on head CT scans when changing the reconstruction method alone. However, changes in dose parameters were not explored which may be something to consider in future investigations.

P028 Rare case of cerebral aqueduct web in Neurofibromatosis

May Ting Tan; Steven Yong Keen Hor; Joseph Alex; Hussein Hassan; Deepak Pai
Northern Lincolnshire and Goole NHS Foundation Trust

Background: A 42-year-old lady with newly diagnosed neurofibromatosis type 1 was found to have raised blood pressure. 24-hour urine metanephrines and plasma metanephrines were consistent with excess metanephrines and normetanephrine's excretion. Hence she was diagnosed with phaechromocytoma. She is generally fit and well. MRI brain was requested to rule out cerebral neurofibroma or sympathetic chain paraganglionoma. Incidental findings of moderate ventriculomegaly of the lateral ventricles and the third ventricle were noted. There is also a very subtle focal area of bridging soft tissue in the aqueduct suspicious for a web with potentially impaired CSF transit across the aqueduct.



Discussion: An aqueductal web is a translucent membrane which is composed of fibrillary neuroglia with ependymal cell clumps[1]. It is more commonly found in children with congenital aqueduct stenosis. Adults with aqueductal web usually present with chronic headache. Incidence of obstructive hydrocephalus in patients with neurofibromatosis is approximately 5%. Obstructive hydrocephalus secondary to cerebral aqueduct web is rare but has been reported[2]. Recognising this bridging soft tissue is important as cerebral aqueduct web is curable by surgery[3].

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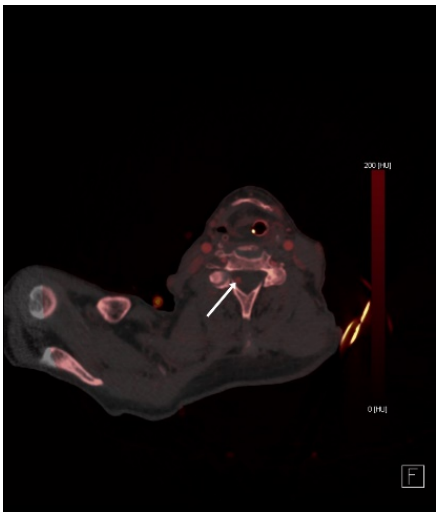
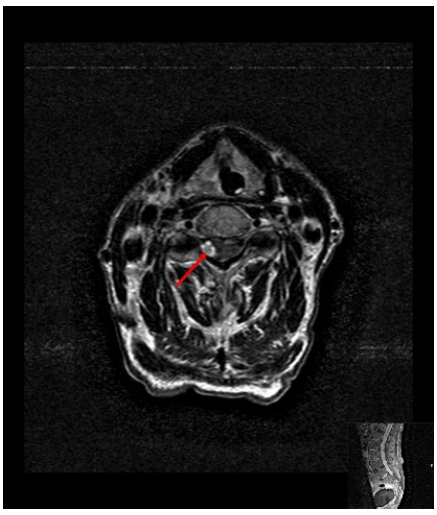
P029 Multi-modality imaging features of an intradural extramedullary spinal venous varix

Jade Kayran[1]; Karthigan Ravindran[2]; Ata Siddiqui[2]; Sundip Udani[2]
[1]University College London; [2]Guy's and St Thomas' NHS Trust

Background: Intradural extramedullary venous varices are rare, with only a few cases being discussed in the literature, and can be radiographically challenging to diagnose. They can present similarly to other pathologies such as arterial venous fistulas, epidural haematomas and nerve sheath tumours but are a vital differential diagnosis to consider, as this can significantly affect patient management.





Purpose: An 86-year-old man presented with confusion, reduced GCS and pain when moving the upper limbs following a fall. The initial CT head did not demonstrate acute pathology. On the trauma body CT, a small hyperdensity was demonstrated in the spinal canal. As the patient was also on Clopidogrel, it was suspected that he had an epidural haematoma. This was further investigated with a dual energy CTA and MRI spine. The combination of imaging findings was more consistent with an intradural extramedullary venous varix at the level of C5 resulting in effacement of the cord. Arrow demonstrates the extramedullary venous varix on a dual energy CTA iodine map (far left) and Axial T2w MRI cervical spine (left).

Summary: Intradural venous varices are an important pathology to identify, as this will guide future patient management. The emerging role of advanced dual-energy CT in improving delineation of the lesion will be discussed as well as specific MRI imaging features to aid diagnosis (the 'doughnut-sign') [1]. The use of time-resolved MRI sequences will be highlighted as a further adjunct to help clinch the diagnosis.

1. Huynh TJ, Willinsky RA. (2017) Intradural spinal varix: the doughnut sign on T2 weighted MR and confirmation with gadolinium enhanced arterial and blood pool MR angiography. BJR Case Rep; 2: 20160078.

P030 Central nervous system findings in Neurofibromatosis type 1: A pictorial review

Jay Patel[1]; James Cusack[1]; Athar Barakat[1]; Maneesh Bhojak[1]; Samantha Mills[1]; Kumar Das[1]; Shubhabrata Biswas[1]; Shivaram Avula[2]

[1]The Walton Centre; [2]Alder Hey Children's NHS Foundation Trust

Background: Neurofibromatosis type 1 (NF1), also described as Von Recklinghausen's disease, is an autosomal dominant multi-system neurocutaneous syndrome, which results from mutation of the NF1 gene, a tumour suppressor gene, on chromosome 17. It is one of the RASopathies, caused by mutations of the Ras-MAPK pathway genes and it affects about 1 in 3000 people. The range of symptomatology in NF1 is variable, from mild to severe. Pathology can affect the central nervous system, peripheral nervous system, skin, skeletal system, lungs and vasculature.

Purpose: The aim of our poster is to familiarise the reader with common findings in NF1 in the CNS and to demonstrate various radiological features of NF1 related to the CNS. The lesions pertinent to the CNS include: waxing and waning focal white matter signal abnormalities, gliomas (particularly those involving the optic nerve and pathway), dural ectasia, lateral meningocoeles, spinal cord tumours, vascular disorders and musculoskeletal dysplasias (including sphenoid wing dysplasia and kyphoscoliosis, among others).

The salient imaging features of the lesions are emphasised, helping in diagnosis and follow-up of the lesions. Relevant differential diagnoses are also described.

Summary: In summary, neurofibromatosis is one of the commonest neurocutaneous disorders, often associated with central nervous system abnormalities. Knowledge of the radiological findings of these lesions is important for diagnosis and management of the condition.

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P031 Adult neuroimaging manifestations of early life insults: A pictorial review

Lucy Hilder

Oxford University Hospitals NHS Foundation Trust

The developing brain is susceptible to multiple insults in utero, and within the perinatal and neonatal periods. Imaging manifestations of pathologies such as intraventricular haemorrhage, perinatal/neonatal stroke, and congenital infection will be familiar to the paediatric radiologist, however the long-term sequelae can present a diagnostic puzzle to the adult radiologist if encountered later in the patient's life and without adequate clinical history. This pictorial review aims to highlight the adult neuroimaging features of some of the more common early life insults to help familiarise the general radiologist.

P032 Carotid CTA in hyperacute stroke: How to report

John Morlese[1]; Zahida Hussain[1]; Ruzeenah Begum[1]; Sarah Yusuf[1]; Atique Imam[2]

[1]Sandwell and West Birmingham NHS Trust; [2]Great Western Hospitals NHS Foundation Trust

Background: The treatment of hyperacute stroke has been revolutionized in the last few years. The introduction of mechanical thrombectomy for large vessel ischaemic stroke has improved patient outcomes. The radiologist's role has also changed and become more important. The CT imaging not only needs to be performed and reported quickly, but also a CTA (intracranial and neck) is additionally required. A detailed knowledge of the importance of this combined CT head and CTA protocol in hyperacute stroke is needed. Also, a detailed understanding is required of the information to be given in the report to aid the neurointerventionalist in determining which patients may benefit from mechanical thrombectomy. As a large volume of hyperacute stroke imaging is performed in non-specialist neuroradiology hospitals, the general radiologist needs a deep understanding of these issues.

Purpose: The aim of this pictorial review is to demonstrate the correct CT head/CTA protocol for the evaluation of hyperacute stroke patients and to describe an approach to reporting the CT head/CTA.

Summary: We aim to give a detailed description of the CT imaging technique required to investigate hyperacute stroke patients. We will provide a comprehensive approach to reporting CT head and CTAs in the hyperacute setting. Focus will be given to the imaging features that help the neurointerventionalist decide which patients are suitable for mechanical thrombectomy.

P033 **Intracranial pseudoaneurysm due to non-traumatic ruptured aneurysm: A multimodal pictorial review**

Jon Cleary; Cherry Sit; Lucy Childs; Amit Roy; Sundip Udani
Guy's and St. Thomas' NHS Foundation Trust

Background: Intracranial pseudoaneurysm due to ruptured non-traumatic aneurysm is rare, but may be misdiagnosed for mass lesions, with potentially devastating consequences for the patient.
Purpose: Using a case-based approach, this educational presentation aims to improve awareness by reviewing aetiology of intracranial aneurysms and pseudoaneurysms. Describing the radiological approach and imaging pitfalls in pseudoaneurysms, comparing appearances on unenhanced and contrast CT, CT angiography and MRI. Discussing the emerging role of advanced dual-energy CT (DECT) in improving delineation of lesions. Providing an overview of endovascular management.
Summary: Example cases include: A 69-year-old male admitted after a tonic-clonic seizure, who underwent unenhanced CT, dual-energy CTA and MRI -displayed side-by-side. Unenhanced CT revealed a large right temporal lobe soft tissue mass with associated white-matter oedema. Contrast-enhanced DECT was performed. This enables generation of iodine maps to assess intravascular contrast content. The patient later had an MRI brain with time-of flight MRA. Delayed CE-CT demonstrated typical 'snowman' appearances of an aneurysm at the right M1/M2 bifurcation (the 'head') with surrounding peripherally calcified pseudoaneurysm (the 'body'). Both were seen as a heterogenous low signal temporal lobe mass on T2-weighted MRI.
Iodine maps from the DE-CTA delineated the aneurysm sac. The patient underwent further management from the local endovascular neuroradiology centre. While this entity is rare, pseudoaneurysm from an underlying aneurysm is an important differential in apparent mass lesions. DECT may have advantages over MRI in delineating vessel and aneurysmal sac from surrounding pseudoaneurysm. This may improve interventional planning.

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P034 **Chordoid glioma – A rare third ventricular entity**

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Background: Chordoid glioma is a rare, slow-growing glial tumour of the anterior third ventricle which, to date, has been reported in approximately 100 patients worldwide[2]. It shows a 3:1 female preponderance and a mean age of presentation of 46 years old[4] with its presenting clinical features being non-specific[1-3]. Early diagnosis is important because tumour excision is a viable curative option although there are important differentials to consider for a tumour at this particular location[1] which has implications for management.
Objectives: Description of the clinical, histological and radiological aspects of a case seen at our institution. Discuss important considerations relating to diagnosis and management. To gain an insight into the clinical, imaging, oncological aspects of this rare entity as well as diagnostic dilemmas and considerations for management. All professionals involved with neuro-oncology MDTs should find this useful.
Summary: We will present the case of a 45-year-old patient who attended with visual disturbance in a poster format. In depth clinical history, together with key CT and MRI (including post op MRI) imaging will be displayed. Many of the imaging features of our case are characteristic of what has been described for this entity and will hence be helpful to radiologists. We will also highlight any other features that were not seen in our case but are described in the literature for completeness. Important differential diagnoses to consider will be highlighted together with the impact of these on informing initial investigation.

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BREAST

P035 **A randomised clinical feasibility trial of a breast immobilisation device: The SuPPORT 4 All (S4A) Project**

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Background: Improvements in cancer survival for women with early breast cancer have led to more focus on long-term toxicities of treatment. We have developed a novel support bra (S4A bra) to lift the breast away from the chest wall to reduce the dose to OAR, particularly suited for women with larger breast size.