A case of acute, severe and symptomatic hypocalcaemia: lessons for patients on the AAU.

Fenella Maggs

Case Reports

AIM

To illustrate the importance of checking calcium levels regularly, and to review causes of acute hypocalcaemia, in patients on the Acute Assessment Unit.

METHODS

The case is reported of a 77 year old lady admitted with sepsis, hypotension, lactic acidosis and acute kidney injury from an uncertain origin. She had a background of myeloma which had been treated 18 months earlier and had been continued on the bisphosphonate clodronate. Sepsis was empirically treated with gentamicin, benzyl-penicillin and metronidazole. On day 4 of admission she was noted to be severely hypocalcaemic and hypomagnesaemic, which improved after the oral bisphosphonate was stopped and calcium supplementation administered.

RESULTS

The potential causes for hypocalcaemia are discussed, including:

- Sepsis and critical illness are well documented as causes of hypocalcaemia. The degree of hypotension and lactic acidosis would put this patient at risk of hypocalcaemia. 1,2
- Bisphosphonate toxicity potentiated by a fall in renal function can exacerbate hypocalcaemia. This is however more common following intravenous preparation. 3,4
- Gentamicin is a recognised cause of hypocalcaemia and hypomagnesaemia. There have been reports of a synergistic effect with bisphophonates in lowering calcium levels. 5
- Rhabdomyolysis causes acute kidney injury and associated hypocalcaemia. However, the history was not consistent for this, and a normal creatinine kinase level excluded this diagnosis.

CONCLUSION

Calcium levels of acutely unwell patients should be checked on admission and at regular intervals throughout their inpatient stay. Furthermore, when acute kidney injury is diagnosed medications should be rationalised.

REFERENCES


A case of high output cardiac failure caused by thyrotoxicosis and Paget’s disease of the bone exposed by Non-invasive cardiac output monitoring.

Alistair Green

Case Reports

Introduction

High-output cardiac failure is a rare type of heart failure. This case shows how esmolol can be used to control fast atrial flutter with heart failure and how a non-invasive cardiac output monitor (NICOM) uncovered this rare cause of heart failure.

Case

An 86-year-old man presented with breathlessness and ankle oedema. He had thyrotoxicosis treated with carbimazole, a AAA, type 2 diabetes and Paget’s disease of the bone. On examination, he had signs of heart failure and a regular tachycardia. ECG showed atrial flutter with 2:1 block and LBBB and his CXR confirmed pulmonary oedema. He was treated with iv furosemide and loaded with Digoxin. Later he deteriorated with his respiratory rate increasing to 40/min. His heart rate was unchanged and BP was borderline at 110/60. The duration of the atrial flutter was unknown and so intravenous rate control was preferable to cardioversion. Treatment with IV B-blocker or calcium channel blockade risks hypotension and making heart failure worse. To monitor this gentleman’s cardiac output during rate slowing a NICOM was attached. This showed a supra-normal cardiac index and a low total peripheral resistance suggesting high output cardiac output cardiac failure. IV esmolol was started at a low dose and uptitrated until his heart rate was slowed to 110 bpm with symptomatic improvement in his breathing. His cardiac output and BP was stable so he was given oral bisoprolol. The following morning his heart rate had fallen to 72 and he discharged home on furosemide, digoxin, bisoprolol and warfarin.
A case of pneumopericardium secondary to cocaine use

Olaku Okeke

Case Reports

A case of Pneumopericardium/Mediastinum secondary to cocaine

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Royal Albert Edward Infirmary, Wigan

Introduction: Pneumo mediastinum and pneumo pericardium is a rare but well recognised complication of cocaine ingestion. We present the case of a young gentleman who presented with chest pain post cocaine ingestion.

Case History: A 26 year old gentleman with no significant past medical history was referred by his GP to the accident and emergency department with a one week history of chest pain and general malaise. He described it as an upper retrosternal sharp pain radiating upwards towards his neck, worse on deep inspiration and on lying flat associated with feeling generally run down. The pain had been present for one week but worse over the 3 days leading up to admission. There was no associated cough, vomiting, palpitations, shortness of breath or fever. He had a history of intermittent cocaine use and possible use on the day of onset. He denied any smoking history or significant alcohol intake and there was no family history of ischaemic heart disease or sudden cardiac death.

On examination – he appeared well and his vital signs were stable (Temp 36.0, BP 118/79, HR 72, RR 18, oxygen sats 97% on room air). Neck examination revealed crepitus in the left supraclavicular fossa and anterior triangle of neck. Chest and cardiovascular examinations were completely normal.

Routine bloods revealed mildly raised wcc 12.4 (predominantly neutrophils 8.29), the rest of the FBC, U+Es and LFTs were within normal limits. ECG – showed normal sinus rhythm with high take off ST segments in leads V2 & V3. His CXR (Fig A) revealed a linear radiolucent area in the left cardiac border with minor air pockets in the subcutaneous tissues in the left supraclavicular fossa.

A diagnosis of pneumopericardium was made likely secondary to cocaine use and he was admitted for overnight observation and analgesia. He remained stable and repeat CXR done 72 hours later showed complete resolution.
Acute Diaphragmatic Dyspnoea: A Case Series

Matthew Beardmore

Case Reports

Aim/Method

Diaphragmatic pathology may cause dyspnoea, classically on recumbency and during swimming. The incidence of diaphragmatic pathology is unknown. Such pathology, often asymptomatic, may present acutely to the AMU. Three cases of ‘acute diaphragmatic dyspnoea’ seen on the AMU of a city-centre teaching hospital are presented to remind the acute physician of this important differential; highlight the variability in presentations, important historical enquiries, aetiology, investigation and prognosis of such cases. All had a raised hemidiaphragm on initial radiography and outpatient follow-up.

Outcome

A 67-year-old gentleman presented recurrently with intermittent left-sided chest pains and dyspnoea, undergoing myoview scans before being diagnosed with a left transudative sub-pulmonic effusion of unknown aetiology. A 65-year-old gentleman developed acute-onset painless dyspnoea on recumbency, initially treated and investigated as pulmonary embolism (PE); final diagnosis of transient idiopathic right phrenic nerve palsy (PNP). Finally, a 50-year-old gentleman presented with marked dyspnoea and cough, treated several times with antibiotics; final diagnosis of stretch-induced PNP secondary to previous massive PE.

The main sub-division of diaphragm pathology is into PNP and diaphragm mobility restriction. Bedside ultrasound is invaluable in distinguishing these and guiding further investigation with CT and lying/standing spirometry, demonstrating an exaggerated decline in FVC on recumbency. In each case, careful attention to initial chest radiography would have helped better target subsequent investigation.

Conclusion

This case series serves to remind the acute physician of an important, often non-specific, cause of dyspnoea where basic radiology may help target investigations to reach a prompt and accurate diagnosis.
Acute HIV seroconversion illness in the Acute Medicine Unit.

Koenraad Van den Abbeele

Case Reports

Background: Although up to 80% of HIV patients experienced a viral syndrome during their seroconversion very few are diagnosed at this early stage.

Clinical Presentation: A 32y man presented to AMU ill for 3 weeks. Initially he suffered 2 weeks fever, diarrhoea and vomiting. On admission he mentioned a new episode of 2 days of fever, headache and sore throat. Clinical examination revealed T\(^{\circ}\) 36.4°C, HR 109bpm, BP 124/82, pallor, dehydration, faint blanching rash and inflamed right tonsil. Lab tests: WBC 3000 /mm\(^3\): 60% neutrophils, 33% lymphocytes, 7% monocytes, thrombocytopenia 75 000/mm\(^3\); Hb and U&E normal; Paul & Bunnel negative. At the PTWR he was afebrile and felt well. He was discharged with a diagnosis of viral pharyngitis to await serology results of EBV and routine HIV. Six days later he represented with headache, photophobia, vomiting and fever. On this occasion risk factors of MSM and a PMH of gonorrhoea were documented. CT Head was normal. LP: WCC 6, RBC 1, Protein 0.95, Glucose 3.5; diagnosis viral meningitis. The HIV result of the first admission had returned weakly positive. Subtle differences in serology results between the repeat HIV test sample and the previous allowed us to unequivocally document a seroconversion.

Discussion & Conclusion: HIV testing should be part of a fixed lab investigation panel for viral syndromes such as glandular fever and viral meningitis to decrease missed diagnoses.\(^1,2\) In high prevalence areas (2 per thousand) BHIVA and NICE guidelines recommend routine HIV testing for all medical admissions.\(^3,4\)

References:


4. Increasing the uptake of HIV testing among black Africans & MSM (Nice Guidance PH33&PH34, March 2011)
Acute Infective Discitis in an 83 year old female

Daniel Birks

Case Reports

Introduction

Discitis is a relatively rare but potentially devastating condition. We report a case of acute infective discitis in an 83 year old female.

Case report

This woman presented with general deterioration over a two week period, specifically decreased mobility, recurrent falls and increased lethargy. She also described intermittent central back pain over a period of months and a feeling of decreased sensation in the left leg. Constipation and urinary retention were noted on admission. Initial examination showed decreased power and sensation in the left leg with preserved reflexes. A CT scan showed generalised cerebral atrophy with scattered ischaemic change, but no acute change. Progressive leg weakness, loss of sensation and increased severity of back pain were noted over subsequent days and a neurology opinion gained. A T4 sensory level and upgoing plantar reflexes were elicited; subsequent urgent MRI spine revealed acute infective discitis with severe cord compression at T5/T6. The patient was transferred to a specialist centre for a prolonged course of intravenous antibiotics.

Discussion & conclusion

Septic discitis has a suggested incidence of 2/100,000/year. Fever and backache are the commonest symptoms. Interestingly, less than half present with neurological signs. Staphylococcus aureus is the most common causative organism. The condition is most commonly seen in those having undergone invasive procedures; with underlying malignancy; in diabetes mellitus. The diagnosis is established by MRI spine and/or CT guided biopsy. Long term treatment with flucloxacillin and an appropriate cephalosporin are advised. This case highlights the importance of considering discitis as an important differential diagnosis.

References

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- Goel V, Young JB, Patterson CJ. Infective discitis as an uncommon but important cause of back pain in older people. Age and Aging 2000; 29; 454-456
Adrenal crisis precipitated by Thyroxine treatment – A case of concurrent Primary Adrenal Insufficiency and Primary Hypothyroidism

Paarul Prinja

Case Reports

Adrenal crisis precipitated by Thyroxine treatment – A case of concurrent Primary Adrenal Insufficiency and Primary Hypothyroidism

Primary adrenal insufficiency is an endocrine disorder characterised by cortisol and aldosterone deficiency, caused by the destruction of the adrenal cortex. Adrenal crisis is a medical emergency, characterised by symptoms including nausea, vomiting, hypoglycaemia and hypovolemic shock. An adrenal crisis can be precipitated by infection, trauma or as in this case thyroxine treatment.

A thirty-year-old female presented to AMU with four weeks history of symptoms including lethargy, headaches, dizziness, vomiting and two stone weight loss. Her General Practitioner saw her three weeks prior to this presentation. Bloods taken at this time showed an elevated TSH. Levothyroxine treatment was commenced with some improvement until a few days before admission.

At the time of admission to AMU, she was found to be hypotensive, tachycardic and dehydrated. Blood chemistry showed hyponatremia, hyperkalaemia, low random cortisol and hypoglycaemia. A diagnosis of adrenal crisis precipitated by thyroxine treatment was made. Treatment was commenced with intravenous hydrocortisone, fluids, glucose and subsequent mineralocorticoid replacement. With this treatment and close monitoring on the unit, the patient recovered well and was discharged four days after admission.

This case illustrates how an adrenal crisis in undiagnosed Primary adrenal insufficiency can be precipitated by thyroxine treatment. Having one autoimmune condition can increase the chance of developing a second but rarely do they happen simultaneously. It also highlights the importance of treating underlying adrenal insufficiency first.

References

An unusual case of heart failure

Hannah Wong

Case Reports

Aim

To describe an unusual case of heart failure

Methodology

A sixty-seven year old woman with a six month history of abdominal pain and weight loss, on a background of paroxysmal AF and ‘colitis’ was admitted with worsening pain and vomiting.

Initial examination and observations were unremarkable.

Chest radiograph suggested cardiomegaly and prominent vascular markings. Bloods showed neutrophilia, new-onset mild renal and liver function derangement, and hypercalcaemia.

On day two, she became acutely tachypnoeic and hypoxic; a CTPA excluded a PE, instead showing severe heart failure. The patient deteriorated and arrested going into a PEA rhythm. She was resuscitated, intubated and transferred to ICU. An echocardiogram showed moderate-severe left ventricular failure (ejection fraction 38%) with septo-apical hypokinesis. The myocardium was globally bright with a speckled appearance, suggestive of amyloid deposition.

A recent coronary angiogram and echocardiogram were normal; therefore coronary artery disease was unlikely.

In view of the hypercalcaemia and impaired renal function she was investigated for myeloma as an underlying cause. Bence-Jones protein and free light chains were detected on urine electrophoresis, bone marrow biopsy showed a monoclonal gammopathy and Congo red staining of intestinal biopsies showed extensive amyloid deposition; confirming the diagnosis of heart failure from amyloidosis secondary to multiple myeloma.

Outcome

She began Velcade chemotherapy responding well with a reducing paraproteinemia and was discharged. Sadly at the time of writing the patient has passed away.

Conclusion

Although amyloidosis is not a common cause of heart failure, this shows that alternative aetiologies should remain within the clinician’s differential.

References
An unusual complication in diabetic ketoacidosis presenting to an acute medical unit

Ullal Ananth Nayak

Case Reports

Case

A 30-year-old man with type 1 diabetes presented to his general practitioner with a 24 hour history of vomiting. He was referred to the acute medical unit where an initial assessment confirmed a diagnosis of diabetic ketoacidosis potentially contributed by missing regular insulin for 24 hours.

With initial management as per the national guidelines with fluid resuscitation and intravenous insulin, he recovered from the ketoacidosis and hyperglycaemia but developed central chest pain. An electrocardiogram was normal. The serial Troponins were negative. On auscultation a pericardial rub was heard and on palpation there was crepitus in the supraclavicular area on both sides. The chest X-ray confirmed presence of significant pneumomediastinum and subcutaneous emphysema (figure 1). CT scan of thorax (figure 2) was consistent with the chest X-ray findings and excluded pulmonary pathology like consolidation and also excluded oesophageal tear (Boerhaave’s syndrome). The pneumomediastinum resolved spontaneously without any intervention and the patient with discharged home with appropriate diabetes follow up care arrangements.

Discussion

Pneumomediastinum, the presence of gas in the mediastinum, is a recognized rare complication of Diabetic ketoacidosis but less commonly perceived in routine clinical practice. Vomiting and acidotic hyperventilation may lead to alveolar rupture as a result of increased intra-alveolar pressures with subsequent air leakage along the perivascular sheaths toward the mediastinum. The presentation is similar to that of spontaneously pneumomediastinum and usually has a benign course. Its recognition in severe diabetic ketoacidosis can prevent unnecessary investigations by the treating acute care physicians.
Anisocoria: an uncommon aetiology

Elpida Toumasi

Case Reports

AIM
We report the case of a patient with anisocoria due to an anticholinergic patch. This is an unusual cause for the symptom but one that should be considered.

METHODS
A 42-year-old female was admitted to the EAU with anisocoria. She experienced some blurring of vision on reading. She had a past medical history of migraines and was on pizotifen.
The patient underwent left breast lumpectomy under general anaesthetic a day prior to her presentation. Postoperatively she developed nausea and vomiting. She was treated with antiemetics (cyclizine and ondansetron) and was discharged home the following day once her symptoms settled.
On examination she had a dilated left pupil, unreactive to light and accommodation. Fundoscopy revealed an indistinct disc margin on the left. We note the absence of ptosis, corneal erythema, tenderness, proptosis or other focal neurology. She was subsequently noted to have a hyoscine patch behind her left ear which was thought to be the cause of the anisocoria. She was reassured and discharged. A week later the anisocoria completely resolved.

OUTCOMES/RESULTS
The application of a topical anticholinergic patch is an unusual cause for anisocoria. We identified four similar cases reported in the literature, two of which were in paediatric patients.

CONCLUSION
In the absence of other symptoms and signs to suggest another cause for anisocoria, topical anticholinergic patches should be considered and the patient should be asked about their use. This is particularly important as these can be bought over the counter and may not be included in the patient’s repeat prescription record.
Beyond Occam's Razor

Nicolai Wennike

Case Reports

Aim

To encourage the Acute Physician to think beyond the most favoured diagnosis

Methodology

A 32 year old male who is an ex-IVDU for 18 months was seen by his GP with a swollen left leg after a one-off injection to his groin using a clean needle. His ultrasound confirmed an extensive DVT involving the femoral vein and he was started on enoxaparin. 7 days later he represented to the GP with symptoms suggestive of cellulitis requiring oral antibiotics, and after 3 days was referred to AMU for iv antibiotics as he remained unwell.

Outcomes and results

On examination he was septic, the leg was grossly swollen with a chronic groin sinus but no discharge and no peripheral neurovascular compromise. No other sources of infection were found. However there was a disproportionate amount of pain in his left thigh with elevated markers of inflammation and creatinine kinase of 210 u/L.

Broad spectrum antibiotics and fluids were commenced and urgent imaging of his leg was arranged, which showed extensive oedema and gas in his thigh consistent with myonecrosis (Figure 1 &2). Unfortunately despite radical debridement and optimal Intensive Care he continued to deteriorate and died.

Conclusion
This case highlights the need for awareness of necrotising soft tissue infections (NSTI’s). DVT’s and soft tissue infections are common in IVDU’s but they are at higher risk of developing NSTI’s.

This case also highlights the need to reconsider diagnoses if the patient fails to follow the expected course of an illness.
Can too much water kill?

Tehmeena Khan

Case Reports

A 32 year old lady presented to the ED with a reduced conscious level following a four day history of diarrhoea and vomiting. She managed compensatory water intake. Initial examination was unremarkable. She was euvalaemic and afebrile. A differential diagnosis of viral encephalitis/meningitis was considered, however, CSF analysis for viral PCR, microscopy and culture were unremarkable. An urgent CT scan confirmed cerebral oedema. Sodium replacement with 0.9% saline was commenced (125ml/hour). Sodium levels were checked at frequently to ensure adequate replacement. The diarrhoea and vomiting subsided within the first 24 hours and her GCS normalised. On the subsequent day, she passed 700ml of urine in 6 hours, paired osmolalities revealed an SIADH picture (table 1). Symptoms resolved by day three, and she was discharged home.

DISCUSSION

Sjoblem describes a fatal case of a young woman who presented with seizures and reduced conscious level after drinking excessive amounts of water following an episode of gastroenteritis (3). Studies show that female athletes are more likely to develop hyponatraemia and that oestrogen and progesterone influence the Na⁺K⁺ATPase pump that helps reduce solute levels in cells (4) predisposing to hyponatraemia related cerebral oedema. The infusion of saline (relatively hypertonic to serum) can improve the intravascular and extracellular oncotic pressures, leading to cessation of excess ADH secretion. Rapid correction of hyponatraemia in the context of acute hyponatraemia leads to a favourable clinical outcome (5). This case illustrates that a finding of acute onset hyponatraemia should be treated promptly as an emergency with rapid replacement of sodium.
Catheter-directed thrombolysis (CDT): Reducing the risk of Post Thrombotic Syndrome

Heather Constable

Case Reports

INTRODUCTION

Acute deep vein thrombosis (DVT) is associated with significant morbidity and mortality. Standard therapy with anticoagulation is proven to minimise the risk of propagation of thrombus, pulmonary embolism and death, but it does not promote clot lysis. Post thrombotic syndrome (PTS) is a well recognised complication of DVT, the risk of which is currently addressed with the use of anti-embolic stockings only. There is mounting evidence for the introduction of Catheter-directed Thrombolysis (CDT)\textsuperscript{1,2} in addition to conventional measures to restore venous valve function and patency.

CASE DESCRIPTION

We describe an interesting case of a 36 year old female who presented to our DVT clinic 4 weeks post partum with an acute extensive iliofemoral DVT. She was started on LMWH and was admitted under vascular surgery the following day for Catheter-directed Thrombolysis. This encompassed an extensive aspiration thrombectomy of the iliac, femoral and popliteal veins followed by a bolus and infusion of thrombolytic agent Actilyse. Repeat CT venogram showed evidence of May Thurner Syndrome, indicated by the presence of a tight stenosis of the common iliac vein near its origin, which was treated with endovascular stenting.

DISCUSSION

The advent of CDT raises questions about its potential to prevent PTS and improve quality of life post-DVT. Concerns regarding its safety and cost effectiveness have been raised. There is ongoing research under way\textsuperscript{3}, the results of which will attempt to address these unanswered questions to validate its use in regular practice.

REFERENCES


Diagnosis and Management of Pituitary Apoplexy: a case series from a district general hospital

Lindsay Reid

Case Reports

AIM/INTRODUCTION

Headache is a common presenting symptom to the acute medical receiving unit. Pituitary apoplexy is a rare cause of such a presentation, but is both a medical and ophthalmologic emergency. The aim of this study is to review the diagnosis and management of pituitary apoplexy based on a case series from a district general and recently published guidelines.

METHODS

We retrospectively reviewed the case notes of six patients presenting with pituitary apoplexy to Forth Valley Royal Hospital over a five-year period.

RESULTS

The demographics, past medical history, presentation, investigation and management of the 6 cases are summarised.

CONCLUSIONS/LEARNING POINTS

1. A high index of suspicion is required for the diagnosis of pituitary apoplexy - it can present to DGHs and it often occurs in patients with no clear precipitating factors.

2. Common presenting symptoms are headache, visual disturbance, vomiting and meningism. Eighty per cent of patients have a hormonal abnormality at presentation\(^1\).

3. MRI is the imaging modality of choice, and identifies the diagnosis in 90% of patients\(^1\). In our series one CT scan and one MRI were initially mis-reported as having no pituitary abnormality. The radiologists should be specifically requested to review the pituitary, and there should be a low threshold for further referral to the neuroradiology team.

4. Five of the six patients underwent conservative management and remained in the DGH with daily visual field and acuity testing. This suggests that conservative management with close monitoring is an acceptable treatment option in stable patients with no/mild visual impairment.
REFERENCES

**Endophthalmitis**

Channa Vasanth Nadarajah

Case Reports

Aims

To increase awareness of a rare cause of sudden onset visual loss.

Method

A 52 year old Caucasian gentleman, with a background of ethanol excess, chronic hepatitis B and type II diabetes mellitus, presented with a one week history of sudden onset painless left visual loss. Associated with pyrexia, rigors, night sweats and generalised myalgia. There was no history of trauma, penetrating eye injury or surgery.

On examination, the acuity was: Right eye 6/12 Left eye 6/60, absent left red light reflex, hypopyon, fibrinous exudates(Fig1). Systemic examination revealed no abnormalities.

Results

Laboratory tests showed an elevated CRP, ESR, liver function test suggestive of biliary obstruction; positive ANA and Anti-Mitochondrial Antibodies. The HbA1c was 7.3%, autoimmune, vasculitic, liver screen, HIV, blood cultures were negative; as were his vitreous cultures, gram stain, PCR, AFB. The transthoracic echo was negative for vegetations and his hepatitis B DNA viral load was low. An USS and CT of his abdomen showed distal biliary obstruction, confirmed as Primary Sclerosing Cholangitis(PSC) on ERCP. He was diagnosed with metastatic endophthalmitis secondary to PSC and/or diabetes and was treated with intravenous and intravitreal vancomycin with good resolution of his symptoms.

Conclusion

Endophthalmitis is a rare condition defined as any inflammation of the intraocular cavities. The classifications are endogenous(blood-borne organisms) or exogenous(i.e. intraocular surgery and post traumatic). Endogenous endophthalmitis affects 5 per 100,000 admissions, and has an associated risk of permanent loss of vision. Early diagnosis and appropriate management is essential for a good outcome, and preservation of eyesight.
GIANT: Gravida-3 In Acute Non-Obstructive Tachypnoea

Shairana Naleem

Case Reports

AIMS

This case is presented to highlight how what appeared to be a textbook case of acute pulmonary embolism in a young pregnant woman turned out to be far more sinister.

METHODS

A 24 year old Gravida 3 Para 2 female who migrated from Pakistan aged 17, presented to the emergency department with acute shortness of breath and left pleuritic scapular region pain at 30/40 pregnant. Her ECG revealed a sinus tachycardia of 120 beats per minute with an S1Q3T3 pattern.

Her only significant past medical history was having had a resection of a right femur Giant Cell Tumour (GCT) in 2007 and subsequently a right femur bone graft in 2010 after a local recurrence.

She had been seen four times in the Maternal Medicine clinic with dyspnoea in the last six months but this was put down to the increased circulating volume of pregnancy.

OUTCOME

An urgent CTPA was negative, but revealed widespread lung metastases. She subsequently had ultrasound-guided biopsies which demonstrated that the histology was in fact consistent with the rarely metastasising GCT. Strangely the cells were actually of the benign morphology.

The patient was transferred urgently to the national sarcoma centre where she underwent a caesarean section and proceeded to intensive chemotherapy with Denusomab.

CONCLUSION

Although there is an 80% risk of local recurrence of GCT, less than 3% metastasise to the lungs. This case demonstrates it is always important to consider a wide differential diagnosis on the frontline and to never dismiss symptoms due to pregnancy.
Hand Lesions: An Unusual Presentation to the Emergency Assessment Unit

Adam White

Case Reports

Aim

To discuss the presentation of unusual hand lesions to the acute medical take.

Methods

A 66 year old retired carpenter presented with painful hand lesions, swinging pyrexias and a new pansystolic murmur. They began as white papules, which over time developed into larger necrotic lesions. They had the appearance of Janeway lesions. He described no other symptoms and was normally fit and well. Examination revealed violaceous nodules on the tip of the right index finger and the base of the right thumb with a central area of necrosis. There was also a small macule over the proximal inter-phalangeal joint of the middle finger. Bacterial endocarditis was ruled out with normal blood cultures and transopesophageal echocardiogram.

Outcome

To further narrow the differential blood tests including HIV and Syphilis and a vasculitic screen were sent, all of which were negative. CT thorax, abdomen and pelvis showed no evidence of occult malignancy. A skin biopsy revealed the final diagnosis to be Cutaneous T Cell Lymphoma (CTCL). This gentleman was seen by the haematologists who commenced Fucibet cream. He responded well to the treatment and was offered regular follow up with a low threshold for future CT scanning.

Conclusion

CTCL is a rare disease but should be considered as part of the differential diagnosis of hand lesions. It is incurable but often has a long indolent course. Management depends on the stage and the subtype and the treatment is wide ranging from topical to systemic therapies.
Ketoacidosis can present with euglycaemia or hypoglycaemia

Muhammad Tufail

Case Reports

Aim:

Ketoacidosis is often due to uncontrolled diabetes mellitus and is a state of absolute or relative insulin deficiency. Ketoacidosis can also occur in the absence of hyperglycaemia. We illustrate this with three cases.

Case reports:

Case 1: A 30 years old depressed lady presented with abdominal pain, vomiting and anorexia over four weeks. Plasma glucose was 12.4mmol/L and arterial blood gas (ABG) showed metabolic acidosis with a pH 7.18 and anion gap 41. Significant ketonuria was present. Patient was treated as starvation ketoacidosis with intravenous dextrose.

Case 2: An 18 year old lady with type 1 diabetes presented at 30 weeks of gestation with vomiting and severe dehydration. ABG showed metabolic acidosis with pH 7.26 and anion gap 35. Severe ketonuria was present with blood glucose 10 mmol/l. Patient was treated as euglycaemic ketoacidosis which corrected within 24 hours (Table 1).

Case 3: A 48 year old gentleman with no diabetes and excess alcohol intake presented with vomiting. ABG showed metabolic acidosis with pH 7.18 and anion gap 39. He had significant ketonuria and hypoglycemia with blood glucose 1.3 mmol/L. Diagnosis of alcoholic ketoacidosis was made and he was treated with intravenous dextrose leading to full recovery.

Conclusion:

Ketoacidosis can occur in patients with or without diabetes and may be associated with euglycaemia or even hypoglycaemia. This case series illustrate the importance of checking for ketoacidosis in patients with vomiting and history of starvation, alcoholism and pregnancy. Treatment of the underlying condition and dehydration will usually resolve ketoacidosis.

References:

Large Spontaneous Haemopneumothorax in haemodynamically stable patient: a rare cause of chest pain

Muhammad Raza Cheema

Case Reports

Aim:

- SHP should be considered as a probable diagnosis in patients presenting with chest pain and dyspnea.
- Young patients in particular may be hemodynamically stable for long periods of time inspite of massive blood loss into the pleural cavity

Case and Results:

A previously healthy 30 year old male, presented to the ED department with sudden onset of left sided chest pain and progressive breathlessness for the past 4 days. The chest pain was sudden in onset, sharp and non-radiating. Chest x-ray revealed large left sided hydropneumothorax with a degree of contra lateral mediastinal shift (figure 1). CT chest confirmed findings and ruled out any other pathologies including occult rib fractures (figure 2). He was transfused 3 units of blood as admission haemoglobin was 9.3 g/dl. An intercostal chest drain was inserted which drained 1500 mls of fresh red blood. The hydropneumothorax was treated conservatively with spontaneous resolution of bleeding.

Spontaneous Haemopneumothorax is a rare cause of unexpected circulatory collapse in a young patient and can be potentially life-threatening. Since it is a rare diagnosis, it is unlikely that admitting doctors have experienced similar cases especially in the context of no history of trauma. SHP is often life threatening and is associated with hemodynamic instability of the patient. Diagnosis of this condition presenting in haemodynamically stable patients, as in the case reported above, requires a very keen observation keeping spontaneous hemopneumothorax in mind as a differential diagnosis for chest pain and dyspnea. Prompt examination and investigations should be instituted to diagnose the condition earlier in order to prevent life-threatening complications.

Conclusion:

SHP is a rare diagnosis especially in the context of a haemodynamically stable patient and no history of trauma in a young patient. We urge a high index of suspicion of SHP in young patients presenting with spontaneous onset of chest pain and dyspnoea and recommend prompt investigations, discussion with senior colleagues and cardiothoracic colleagues to prevent life-threatening complications in such patients. Conservative management with intercostals chest tube can be an option in haemodynamically stable patients however, a very low threshold should be maintained for early surgical intervention.
Let us sleep QTc

Shoneen Abbas

Case Reports

AIM

We present a case of overdose of Diphenhydramine. It was typical of ingestion of this “sleep aid” with associated ECG changes. We aim to increase the awareness within the Acute Medicine community.

METHODS

22 years old female presented with acute auditory and visual hallucinations. Her friend found her behaving strangely and euphoric. She then witnessed her having a “shaking episode”.

Her heart rate was 130bpm. Capillary blood glucose was 6.7. She was agitated. Pupils were dilated at 8mm.

Routine bloods including paracetamol, salicylate and CK were normal apart from K 3.1 and HCO3 23. ECG showed sinus tachycardia with QTc of 579ms. CT brain was normal.

Her family later found a pestle and mortar, 2 empty packets of Diphenhydramine and 9 cut up capsules of Fluoxetine. In total she took 14 x Cetrizine 10mg, 40 x 50mg tablets of Diphenhydramine (‘sleep aid’ tablet – available over the counter) and 9 x Fluoxetine 20mg (toxic level – 500mg i.e below toxic level)

OUTCOMES/RESULTS

She received IV fluids with potassium replacement and cardiac monitoring. Her ECG normalised 36 hours later and after psychiatry review she was allowed home.
CONCLUSIONS

Diphenhydramine causes blockade of muscarinic acetylcholine receptors causing tachycardia, pupil dilation, hallucinations or delirium. It blocks the delayed potassium rectifier channel, prolonging cardiac repolarisation [1]. This manifests as QT prolongation and may lead to torsades de pointes. Our patient had several features as a result of its overdose. It demonstrates the need to take over-the-counter medicines’ history and having a low threshold to consider overdose of such agents.

REFERENCE

Lyme Disease on the Acute Medical Unit – a Case series at a Southern English District General Hospital

Philip Swales

Case Reports

Aim:

Infection with Borrelia burgdorferi (Lyme Borreliosis) is the most common human tick-borne zoonosis in the United Kingdom. National data demonstrate annual increases in the incidence of laboratory diagnoses of Lyme borreliosis with 905 cases confirmed in 2010\(^1\). Lyme borreliosis may be asymptomatic. The clinical manifestations (Lyme disease) are multisystemic and may present with early localised, early disseminated, or late disease\(^2\).

We present data summarising the early presentation of Lyme disease at an acute hospital.

Method:

Demographic data and clinical presentation were recorded from patients with serologically confirmed Lyme disease presenting to the Royal Hampshire County Hospital, Winchester from 1992-2012.

Results:

446 cases of Lyme disease were identified. 47.0% male, with a bimodal age distribution (peaks during 1\(^{st}\) and 6\(^{th}\) decades of life). Presentation demonstrated a significant seasonal variation, favouring the months of June-August (p<0.0001). The median time from first symptom to diagnosis was 14 days. 52.0% of patients described a preceding tick bite. Clinical findings at presentation were rash (71%), neuroborreliosis (26%, of whom half had VII cranial nerve palsies), arthropathy (7%), flu-like symptoms (5%), cardiac involvement (1%) or other manifestations (<1%).

Conclusion:

Lyme disease is prevalent at this district general hospital. Presentation follows a seasonal variation, with a peak in the summer months, coinciding with tick activity. While Lyme disease affects all age groups, there is a bimodal distribution. Half of patients describe a preceding tick bite and 71% have a rash at presentation. Neuroborreliosis demonstrates a predilection for involvement of the facial nerve.

Massive cutaneous blistering in a dependent 19 year old male with leukodystrophy:

Bronagh Patterson

Case Reports

Aims

To present an unusual and life threatening condition encountered in a district general.

Methods

the patient was examined when admitted and follow up checked via examination of case notes.

A 19 year old male with mental and physical impairment due to leukodystrophy presented with widespread muco-cutaneous blistering progressive over 5 days, following the prescription of penicillin. The total body surface area affected was estimated to be 60% - at presentation he was noted to have criteria for the systemic inflammatory syndrome (SIRS) and he was treated for presumed sepsis with the administration of fluids, non-penicillin based antibiotics and noradrenaline.

A combination of flexion contractures and blistered skin prevented the placement of a (central) intravenous line for more than 24 hours, necessitating the successful intra-osseous administration of all drugs including noradrenaline.

A clinical diagnosis of toxic epidermal necrolysis (TENs)\(^1\) was made (see figure 1), with staphyloccocal scalded skin syndrome (SSSS) as a possible differential.

Figure 1. 19 year old male with TENS

The patient was examined when admitted and follow up checked via examination of case notes.

Outcomes.
Histopathological confirmation of TENs was delayed due to the difficulties of obtaining an adequate appropriate skin biopsy (see figure 2). This delay led to uncertainty about initial specific treatment of the underlying condition with a desire to avoid penicillins that would have been indicated for SSSS.

Figure 2 "Histopathology of TEN shows subepidermal split, full-thickness epidermal necrosis and a sparse perivascular lymphocytic infiltrate"[i]i

**Conclusion.**

No optimal treatment guideline for TENS is available and the patient recovered through withdrawal of penicillins, administration of fluids and vasopressors and appropriate dressings of his blisters. No specific organism was isolated from cultures and the disturbance of physiology at presentation was presumed to be due to ‘skin failure’ secondary to TENS and an associated inflammatory reaction.
Milwaukee Shoulder Syndrome

Channa Vasanth Nadarajah

Case Reports

Aims

To increase awareness of a rare cause of an acutely swollen joint.

Method

An 89 year old right handed lady, with a background of asthma, hypertension and atrial fibrillation, presented with melaena secondary to oesphagitis and gastric erosion. During her admission she developed an acutely inflamed right shoulder. This was her third presentation. There was no history of trauma.

On examination, she was pale, with no rashes or bruises. There was a large boggy, right shoulder swelling, which was tender without evidence of cellulitis. Both active and passive movements were limited (Fig1).

Results

Plain radiograph of her shoulder showed joint space narrowing, subchondrial sclerosis, destruction of subchondrial bone, soft-tissue swelling, capsular calcifications and intra-articular loose bodies (Fig2). Arthrocentesis was performed. Analysis of the synovial fluid exhibited haemorrhagic non-inflammatory cell count with leukocytes 721/mm$^3$. Gram stain was negative, no organisms were seen and cytology analysis was negative as was VDRL. The fluid stained bright orange-red with alizarin red S stain, indicating the presence of calcium hydroxyapatite crystals. The diagnosis of Milwaukee Shoulder Syndrome(MSS) was made and she was treated conservatively with colchicine and physiotherapy with a good outcome.

Conclusion

MSS is a destructive, calcium phosphate crystalline arthropathy. It encompasses an effusion that is non-inflammatory with calcium hydroxyapatite crystals in the synovial fluid, associated with rotator cuff defects. MSS occurs in elderly patients typically aged 60-90 years. There is a female preponderance in the ratio of 4:1. Treatment is usually supportive; resting the affected joint and the use of Non-Steroidal Anti-Inflammatory agents has shown to be very effective.
Not looking right – an unusual presentation of a caecal carcinoma

Will Scotton

Case Reports

Not looking right – an unusual presentation of a caecal carcinoma

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We report the case of an 84 year old lady who presented with a five day history of diplopia and right-sided hearing changes. Past medical history of note was osteoporosis and total knee replacement. On examination she was noted to have right rectus palsy with decreased auditory acuity in the right ear. CT and MRI brain (with gadolinium) failed to show significant pathology. On lumbar puncture, the patient had an increased opening pressure, with 6 white blood cells/mm³, decreased glucose though a normal protein concentration. A cytology sample was not sent. The only other abnormality of note was a CRP of 144 and an ESR of 114 with deranged LFTs. Ultrasound liver showed hepatomegaly with multiple mixed echogenic lesions in keeping with metastases. CT scan abdomen showed findings consistent with an intussuscepting caecal tumour and associated mesenteric lymphadenopathy.

The patient declined further investigation for the suspected carcinoma, though the clinical picture was highly suggestive of leptomeningeal carcinomatosis secondary to primary caecal carcinoma. She was discharged from hospital and passed away peacefully two weeks later.

Leptomeningeal carcinomatosis most often presents in patients with known widespread metastatic systemic cancer (>70%) though occasionally it can be the first manifestation of cancer in the absence of other evidence of systemic disease (5-10%) [1]. There has been only one case report of leptomeningeal carcinomatosis as the first manifestation of colorectal carcinoma [2]. For the acute medic it is important to include leptomeningeal carcinomatosis in the differential diagnosis for those patients that present with multiple focal neurological signs.

References


Pre-eclampsia! Deliver the baby! She did, a week ago!

Malcolm Dow

Case Reports

Here we present a case of severe postpartum pre-eclampsia, presenting with headache one week after a normal delivery, in a previously fit and well 32 year old female, who had had no problems during her pregnancy or the immediate aftermath.

This is an uncommon and poorly understood condition, that if not recognised or treated adequately can progress to eclampsia / multi-organ failure / death (1).

Despite consultant-level medical and obstetric input, postpartum pre-eclampsia was not initially seriously considered in this lady. She was discharged twice after brief admissions, before re-presenting for a third time with full-blown eclampsia, requiring a significant in-patient stay. This could have been avoided.

The differential diagnosis of post-partum headache ranges from the entirely benign to portending imminent catastrophe (2). This poster submission will discuss the differential diagnosis of postpartum headache, red-flag signs and symptoms, key investigations, and the treatment of postpartum pre-eclampsia (3). It is hoped that it will raise awareness of this potentially fatal condition, and the mistakes that can be made in not considering it, or taking it seriously enough, as the case study will illustrate.

References


**PRES (Posterior reversible encephalopathy syndrome): A rare cause of seizure and headache presenting to AMU**

Emma Shacklock

Case Reports

**Intro:** Posterior reversible encephalopathy syndrome (PRES) is a syndrome characterized by headache, confusion, seizures and visual loss as well as radiologic findings of focal reversible vasogenic oedema, best seen on magnetic resonance imaging (MRI) of the brain.

We describe an interesting case of a 72 year old lady seen in status epilepticus with a history of recent palliative oxaliplatin and 5-fluorouracil chemotherapy for colon cancer. She was initially admitted with severe headache a week previously and discharged; re-presenting when her symptoms did not subside. A further CT brain showed no acute bleed, infarct or lesion. Three tonic-clonic seizures were witnessed overnight coupled with new left hemiplegia. A third CT scan showed no interval change however MR brain exhibited cortical and subcortical deep white matter high signal changes in the occipital and parietal lobes bilaterally. Findings were consistent with posterior reversible encephalopathy syndrome (PRES). A neurology review was sought which agreed with a diagnosis of PRES. Our patient’s left sided weakness and neurological signs improved over a course of weeks. There are several cases of PRES described worldwide in the literature following use of oxaliplatin and 5-fluorouracil and many more associated with other cytotoxic agents. 1,2

**Conclusion:** A very interesting case and an unusual cause of headache and seizures, but one that should be considered in patients with a history of recent chemotherapy.

**References:**


Progressive Multifocal Leucoencephalopathy: A stroke mimic in the immunocompromised

Khalilullah Wahdati

Case Reports

Aim: We aim to increase awareness of Progressive multifocal leucoencephalopathy (PML), a rare stroke mimic in the immunocompromised patient.

Case: An 83 year old female, with a background of Mantle cell Non-hodgkins lymphoma (NHL) and previous elective Carotid endarterectomy, presents to the acute stroke unit with a 5 week history of worsening dysphasia (receptive and expressive). The positive findings on examination revealed a moderate expressive dysphasia, apraxia and agnosia with a mild right-sided neglect.

Her initial investigations including ECG, Chest X-ray and routine haematology, biochemistry and an HIV test did not reveal any abnormalities. An urgent MRI scan demonstrated an area of white matter oedema, raising the possibility of PML or spread of NHL. A subsequent diagnostic lumbar puncture performed revealed a lymphocytic infiltrate, no blast cells and the presence of strongly PCR positive JC virus titres, confirming the diagnosis of PML. This diagnosis unfortunately has a poor prognosis and the patient continued to deteriorate, passing away during the course of her admission.

Conclusion: PML is a severe demyelinating disease of the central nervous system, caused by the reactivation of the polyomavirus JC (JC virus). Once a major opportunistic infection in HIV positive patients, it is also seen in immunocompromised patients with lymphoproliferative disorders with or without chemotherapy. It usually presents in a subacute manner, but may even mimic a stroke. Due to the poor prognosis and limited treatment options, early diagnosis can help prevent unnecessary investigations and allow adequate palliation for the patient.
Rapidly deteriorating hypoxia in Wegener’s vasculitis

Heather Constable

Case Reports

INTRODUCTION

Wegener’s granulomatosis is a necrotising granulomatous vasculitis which can cause rapidly progressive hypoxia secondary to alveolar haemorrhage and require urgent ventilatory support.¹

CASE DESCRIPTION

We describe a 76 year old previously healthy patient who presented to the emergency department with a 5 day history of shortness of breath. Chest X-ray revealed bilateral pulmonary infiltrates. Significant initial investigations include a presenting haemoglobin of 6.2, urea 14.5, creatinine 207, and the presence of blood and protein on urine dipstick. The patient’s hypoxia rapidly worsened to the point of requiring mechanical ventilation within the space of 4 hours of presentation. He was transferred urgently to the closest renal centre for plasma exchange and immunosuppression therapy with cyclophosphamide and steroids. He required a brief period of dialysis. cANCA (PR3) was positive confirming the diagnosis of Wegener’s granulomatosis. 3 weeks later a renal biopsy confirmed the presence of crescentic glomerulonephritis.

CONCLUSION

This case illustrates that alveolar haemorrhage can rapidly create a life threatening situation requiring urgent ventilatory support. An early suspicion of vasculitis and prompt referral for treatment is imperative to increase the chances of survival and minimise long term end organ damage.²

REFERENCES

Reexpansion pulmonary edema: A complication of chest drain insertion

Suneeta Teckchandani

Case Reports

AIM/ INTRODUCTION

Reexpansion Pulmonary Edema (REPE) is a rare complication of chest drain insertion for pneumothorax or pleural effusion. It is defined as pulmonary oedema developing in a re-expanded lung due to increased vascular permeability.

We report a case of ipsilateral REPE occurring after chest drain insertion for spontaneous pneumothorax.

METHODS/ CASE PRESENTATION

A 25 year old female presented with right sided pleuritic chest pain and shortness of breath. Her symptoms had started 3 days ago while on a flight. She had a 5 pack year smoking history, otherwise no significant past medical history.

Examination revealed mild respiratory distress and a chest xray showed a large pneumothorax

A chest drain was immediately inserted and showed radiological improvement; however repeat imaging showed partial lung expansion and widespread air space shadowing of right lung.

Her condition deteriorated. REPE was considered and treated with furosemide. By the next day she improved clinically and radiologically.

OUTCOME/ DISCUSSION

Usually REPE is self limited and can even be asymptomatic. However a mortality rate as high as 20% has been described.

Pathophysiologically, mechanical distress on the alveoli and damage by oxygen radicals have been suggested.

In the literature, there have been several risk factors that have been associated with REPE.

Prevention is by gradual pleural drainage. Treatments include administration of diuretics and hyperosmotic colloidal solution; and positive pressure ventilation is needed for some cases.
CONCLUSION

REPE is a rare complication of chest drain insertion associated with mortality. High level of awareness of such a complication together with prevention of this are the key points.

REFERENCES


3. Roberts ME, Neville E, Berrisford RG et al. BTS guidelines for the management of malignant pleural effusion 2010

Spontaneous-Subdural Haematomas in a patient with SLE

Jaydeep Mandal

Case Reports

Acute headache is one of the more common complaints of patients presenting to an acute medical unit (AMU). We present a case of a patient presenting to the AMU with acute headache with a clinical background of Systemic Lupus Erythematosus (SLE). CT Scans demonstrated acute bilateral subdural haematomas. Patients with any auto-immune connective tissue disease are at higher risk of intra-cerebral bleeding due to associated antibody activity, micro-vasculopathy, and potential coagulopathy. When assessing such patients on the AMU it is important to recognize these risks formulate a differential diagnosis.

Subdural haematoma often presents in the first instance with an evolving frontal headache. Its nondescript features can mimic a headache of a less sinister aetiology (e.g. migrainous). It is for this reason that of only eight worldwide reported cases of spontaneous bilateral subdural haematoma (with a clinical history of SLE), in which only two patients have survived.

The exact incidents and prevalence of spontaneous subdural haematoma in the context of autoimmune disease is unknown. Subdural haematoma in itself is usually secondary to trauma, and is considered a rare finding in a patient without any history of trauma. Acute subdural haematoma has a high degree of mortality and morbidity, and often requires early surgical intervention to relieve rising intracranial pressure. Case reports of SLE patients post-op demonstrate good outcomes.

Systemic lupus erythematosus is one of the most common autoimmune conditions in patients presenting to the AMU. In addition, acute headache is amongst the most common presenting complaints. It is for these reasons that clinicians must be aware of the potential for misdiagnosing acute headache in context of SLE. Outcomes in patients with SLE thus-far are poor, as signs of intracerebral bleed can be misleading in early stages.
Syncope in a young lady secondary to autonomic failure from Guillain - Barre' Syndrome

Tamer Shalaby

Case Reports

A 35 year old female was admitted to MAU after an episode of exertional syncope with sweating, palpations and postural dizziness. Diagnosed with URTI the week previous by her GP. Four days before admission the patient reported continuous pins and needles in fingers and toes.

On examination a labile blood pressure and heart rate were noted, normal heart sounds and neurological examination essentially normal. On the ward, the patient continued to complain of sensory symptoms, 48 hours after admission and within an 8 hour period the patient developed progressive ascending LMNL of distal upper and lower limbs bilaterally and loss of reflexes with oropharyngeal weakness and right LMN facial nerve palsy. Neural axis MRI imaging was performed however was essentially normal. Urgent bed side spirometry showed vital capacity of less than 1 Litre, ABG showed T1RF.

Patient was discussed with the tertiary neurology centre who advised that this was a typical presentation of GBS. Patient was admitted and intubated to ITU and received IVIG with good recovery after 3 weeks.

GBS is the most common cause of acute flaccid paralysis throughout the world, patients will often report a history of respiratory or GI tract illness. The patient presents with acute, ascending, symmetrically progressive, inflammatory, demyelinating polyneuropathy including diaphragm paralysis, sensory symptoms and areflexia.

If GBS is suspected liaise with ITU and Neurology, patient should be in a monitored bed to allow for rapid intervention should diaphragmatic paralysis occur, also fatal arrhythmia can occur due to autonomic failure.
Temporal Arteritis with ESR < 50 mmHg/hr: a clinical reminder

Muhammad Raza Cheema

Case Reports

Aim:

- To consider diagnosis of temporal arteritis in patients with new onset or new type localised headache with age 50 or more.

- To consider diagnosis of temporal arteritis even in patients with ESR <50 but meeting the criteria of temporal arteritis clinically.

Case Report, Methods and Results:

Temporal Arteritis is a medical emergency and should be treated promptly as it can lead to permanent loss of vision. It is very commonly associated with a raised ESR, usually more than 50 mm/hr and is one of the essential criteria by the American College of Rheumatology classification of GCA. Here, we describe a case of a 73 year old man presenting with sudden onset 2-day history of sever left sided headache with signs and symptoms of GCA and an ESR of 27 mm/hr. On physical examination he was afebrile and vital signs were stable however he was exquisitely tender in the left temporal artery. CT head was performed to rule out any space occupying lesions. A full blood count showed a normal white cell count of 9.2 x 10^9 /L with an ESR of 27 mm/hr and C-reactive protein (CRP) of 20 mg/L but was otherwise normal. Patient was urgently prescribed 60mg of Prednisolone and was monitored for complications. He had symptomatic relief within 24 hours of initiation of therapy. Patient had a temporal artery biopsy 4 weeks after the steroid therapy was initiated and it suggested signs of post inflammatory changes with reduplication of internal elastic lamina modified by steroid therapy.

Conclusion:

A diagnosis of Temporal Arteritis requires a high index of suspicion as it may manifest in a variety of clinical features. However, a mildly elevated ESR in the presence of clinical features suggestive of GCA should still trigger treatment for GCA. The acute medical staff should be aware of the criteria for GCA, in addition should have a low threshold for treatment for atypical cases as well such as low ESR, arm claudication, dysarthria and phenotypic cases not involving cranial arteries.
Tension Hydrothorax: Urgent Treatment Saves Lives

Jamal Sajid

Case Reports

AIM

To be aware of potentially fatal Tension Hydrothorax, as timely intervention can be life saving.

METHODS

We report a case of 60 year old lady with the background of bronchogenic non small cell lung carcinoma, who presented with shortness of breath for past few days. While being in hospital for less than an hour, suddenly became unwell. She became cold and clammy with thready pulse of 140 bpm and unrecordable blood pressure, her respiratory rate increased to 40/min. Chest examination findings were consistent with large left sided pleural effusion with tracheal shift to right. Urgent chest x-ray showed massive left sided pleural effusion with significant mediastinal shift to right.

OUTCOMES/RESULTS

Urgent needle thoracotomy confirmed presence of serosanguineous fluid with high pressure. We urgently placed 12F chest tube which drained 2L of fluid with immediate improvement in patient’s symptoms.

CONCLUSION

Shortness of breath and slight mediastinal shift are not uncommon in the presence of large pleural effusion. It is not generally recognized, however, that in certain circumstances pleural fluid may accumulate under such greatly increased pressure that it results in gross mediastinal shift. Marked mediastinal shift and compression of the lung causes severe hypoventilation and respiratory acidosis. Pressure of the pleural fluid on the heart and great vessels inhibit central venous return, causing reduced cardiac output and circulatory collapse and metabolic acidosis.

The entity of tension hydrothorax is rare but may be life threatening. The treatment should consist of prompt drainage without waiting for other radiological investigations such as ultrasound and CT Scan.

REFERENCES


The highs and lows of a recurrent headache

Don Milliken

Case Reports

Abstract

AIM – To raise awareness of an under-diagnosed and mistreated condition using a case report. Spontaneous Intracranial Hypotension (SIH) is not an uncommon ailment with a 2006 systematic review suggesting an incidence of 5 per 100,000 (1) It is a significant cause of morbidity and adverse outcomes. SIH is characterised by the triad of orthostatic headaches, low CSF pressure and diffuse meningeal enhancement on magnetic resonance imaging (MRI) of the brain without a past history of trauma or dural puncture. Presentations can be heterogenous and atypical (2).

Traditionally, conservative management is based around bed-rest, hydration, caffeine and fluid therapy, however there have been notable successes using autologous epidural blood patches (1).

CASE – 33 year old lady presented with a 5-day history of severe, progressive, occipital headaches which were relieved by lying supine and aggravated by standing up. After blood work, lumbar puncture, computerised tomography of the head, magnetic resonance imaging (MRI) of the head and three admissions, the patient’s symptoms were finally adequately controlled. This allowed her to return as an outpatient one month after initial presentation to have a further MRI head. This showed cerebellar tonsil ectopia, confirming the diagnosis of low CSF pressure headache.

Conclusion – SIH can present with a medley of different clinical and radiographic abnormalities which lead to a significant diagnostic challenge. This case shows the multiple admissions and investigations which were necessary before this final diagnosis was met. It is important to consider SIH on the list of differentials to prevent unnecessary, costly and invasive procedures.
Tick-bourne fever; not always Lyme disease.

Alison Burgess

Case Reports

Introduction

We report a case of Mediterranean Spotted Fever presenting in a visitor to the UK.

Case description

A 47 year old male presented with fever, headache and erythema at the site of a tick bite sustained in Spain two weeks earlier. A diagnosis of cellulitis was made and antibiotics commenced.

Over the following week, he remained unwell with high swinging pyrexia, headache and a darkening tick bite site (Figure 1). Additionally, he developed a maculopapular rash (Figure 2) and a hepatitis. These features were attributed to antibiotic side-effects but failed to improve with a change of regimen. Lyme serology was negative.

On day nine of admission Mediterranean Spotted Fever (MSF) was postulated. Doxycycline was initiated with marked improvement. He was discharged twenty-four hours later. Serology was consistent with acute rickettsial infection and on consultation with national experts a diagnosis of MSF was made.

Discussion

MSF is a tick-bourne disease caused by *Rickettsia conorii*. Symptoms begin two weeks after inoculation and include fever, headache, single eschar, regional adenopathy and a maculopapular rash\(^1\). MSF rickettsiae cause a vasculitis with potential for widespread complications including hepatitis\(^2\). The treatment is doxycycline\(^3\).

MSF cases in mainland Europe have steadily increased and mortality rates up to 33 per cent have been reported\(^1,4\). Furthermore, poor outcomes have been reported in non-endemic countries due to misdiagnosis of imported infections\(^5\).

Conclusion

Physicians should consider MSF in any patient with a febrile illness who has visited an endemic area and commence appropriate therapy.

References

2. Micalizzi A Le infezioni in medicina. 2007; 15/2:105-10

