

Minute of the Derby Medical Society 26th February 2019
Derby Medical School Lecture Theatre
Junior Doctor Presentation Evening

Apologies

Dr Stuart Holloway
Dr Tony Henry
Dr Wendy Scott
Dr Natalie Jinks

Introduction

Welcome by Miss Hewitt who also introduced the society to new attendees. She also discussed Florence Nightingale and Dr Ogle who set up the DMS.

Welcome was extended to the new student representatives Jack and Liz – both of whom have extensive marketing experience.

The junior doctors presentations began.

1) Dr Claire Grant

‘VATS lung got to do with it?’

The case was of a 48 year old patient with dyspnoea and cough. He was septic with decreased AE at the right side. HE had a previous history of paranoid schizophrenia. He was acutely unwell on his initial investigations also. His CXR showed a large right sided pneumothorax. He had a drain inserted and had frank pus and air – the drain continued to bubble. He had a CT thorax which showed a pneumothorax, correctly placed drain and pus continued to drain. Eventually he was referred to NCH for a VATS procedure. He has pleurodesis and was discharged. He subsequently represented with fever and normal SpO2. He had diarrhoea and was shown to have C. difficile infection. Treated with oral vancomycin. He deteriorated over a weekend. He had a further CT was shown to have multiple loculations. Oesophogeal-pleural fistula. Had Boerhaave’s syndrome. Chronic fistulation is very rare.

2) Dr Jennifer Ryan

‘When is a paraprotein not a paraprotein?’

34 year old lady presented to her GP with several months’ history of back pain and weight loss. The patient had no past medical history of note and did not take any regular medications.

Her GP performed multiple blood tests, including serum electrophoresis, which demonstrated an IgG paraprotein. Also of note was a normocytic anaemia, normal calcium and renal function, as well as deranged liver function tests.

The patient was referred to haematology outpatients for further investigation.

Bone marrow biopsy was performed, which showed no excess plasma cells, making it negative for myeloma. Congo red staining was performed to look for amyloid, which was also negative. The patient underwent a PET CT scan which showed metabolically active, low volume lymph nodes in the neck, axillae, mediastinum, pulmonary hila, upper abdomen and inguinal regions. There was also increased activity in the liver, spleen and both renal cortices.

These results were discussed in the haematology MDT and the patient was listed for an urgent renal biopsy. This showed morphologically normal glomeruli. The interstitium showed heavy infiltration of

IgG4 - expressing lymphocytes. This confirmed a diagnosis of tubular interstitial nephritis secondary to IgG4-related disease and the patient was commenced on oral steroids.

IgG4 - related disease is a multisystem condition characterised by infiltration of involved organs by a "lymphoplasmacytic infiltrate enriched with IgG4 positive plasma cells"

A majority of patients also have an elevated serum IgG4. On serum electrophoresis IgG4 antibodies migrate to a focal, but relatively broad electrophoretic area. If IgG4 concentrations are very high, this can appear as a focal band bridging the beta-gamma area, which can be misinterpreted as a monoclonal paraprotein. On retrospective review of this patient's serum electrophoresis, this pattern was demonstrated and immunofixation showed a polyclonal pattern in the remaining gamma region.

3) Mr Philip Herrod "A case of Hickam's Dictum in Derby"

A 65 year old patient presented on the acute surgical take with a short history of abdominal pain and vomiting. Initial abdominal CT demonstrated widespread retroperitoneal lymphadenopathy and a loop of thickened and inflamed small bowel. Subsequent staging CT demonstrated cervical and axillary lymphadenopathy. The patient was referred to haematology and underwent an axillary lymph node biopsy.

The abdominal symptoms improved and she was discharged to continue outpatient treatment.

Histology from the axillary node demonstrated a marginal zone lymphoma, therefore she was then started on chemotherapy. The patient made an initial improvement and was discharged to continue chemotherapy.

She was then readmitted with ongoing vomiting and inability to eat, with repeat CT demonstrating small bowel obstruction with increased thickening of terminal ileum. In view of her ongoing symptoms, not improved by oncological treatment, the decision was made to proceed to a high-risk laparotomy.

At laparotomy the terminal ileum was found to be matted and grossly abnormal, causing a bowel obstruction. This was resected and the ends exteriorised as a double-barrelled ileostomy. Patient then made an uneventful recovery and discharged a week later.

Histology revealed transmural inflammation, lymphoid aggregates, focal cryptitis and crypt abscesses, in keeping with Crohn's disease.

Hickam's Dictum: "patients can have as many diseases as they damn well." This case highlights the need to keep an open mind when dealing with a patient, as finding one pathology does not necessarily mean it is responsible for all symptoms or indeed the presenting complaint. If the patient does not improve as would be expected, other diagnoses should be considered.

4) Dr Syed Irfan Wafa 'A Case of Pyrexia of Unknown Origin and Recurrent Hospital Admissions in a Cardiac Patient'

Pyrexia of unknown origin (PUO) is defined as a temperature greater than 38.3°C on several occasions, accompanied by three weeks of illness and a failure to reach a diagnosis after one week of inpatient investigations.

We describe a case of a 72-year-old man with a significant cardiac history and a pacemaker in-situ presented to the emergency department of a district general hospital with sepsis five days after he had his pacemaker unit batteries changed. He had deranged vital signs, productive cough and pyrexia. He had a normal chest plain radiograph (CXR). However, with right basal crackles on auscultation, he was empirically treated for a lower respiratory tract infection (LRTI) with intravenous antibiotics.

The patient was discharged but had to be readmitted four times over the span of 4 months due to recurrent pyrexia. Repeated Trans-thoracic (TTE) and Trans-oesophageal (TOE) echocardiograms, and CT neck/thorax/abdomen/pelvis were done however no evidence of infection was found on the scans. A FDG-PET scan was eventually done which showed evidence of pacemaker-lead infection. His pacemaker unit was removed and replaced with a REVEAL device. He improved clinically with no further hospital admission to date.

Routine blood test only showed raised WCC and CRP. Connective tissue disease screen, viral and tumour markers, syphilis serology, and hepatitis screen were negative. Two out of six blood cultures (on separate admissions) done grew *Enterobacter cloacae*.

This case has highlighted the importance to explore previous hospital admissions, building a timeline of events, which could be leading to the patients' current presentation. Moreover, patients led infections, despite negative investigation results.

Therefore, the approach to investigate and treat known source of infections and pyrexia of unknown origin needs to be done systematically according to set hospital protocols and evidence-based medicine presenting with pyrexia after a recent prosthetic implantation should be investigated for prosthesis-related infection.

5) Miss Mei-Ling Henry 'An Unusual Orchidectomy'

A 97 year old man with presented to his GP in December 2018 with slowly increasing left sided scrotal swelling. He had a history of metastatic renal cancer, treated with nephrectomy in 1997, and subsequent pulmonary metastasis in 2015, managed with palliative intent. Ultrasound scan of the swelling revealed a 3.7cm hypervascular mass within the testis, disrupting the normal architecture. Testicular tumour markers were not elevated.

Discussion at MDT concluded that the most likely cause of the mass was a metastatic deposit of renal cancer and advised symptomatic management. Due to pain, the patient opted for an inguinal orchidectomy. This was performed in January 2019.

Histology revealed a testicular tumour, confirmed to be metastatic clear cell renal carcinoma with clear excision margins.

Metastatic tumours in the testis are rare. If the patient doesn't fit the demographic for their presentation, consider rarer causes.

6) Dr Joanna Lumb 'You spin my head right round'

A patient presents to the ED with sudden onset severe nausea and vertigo, which has lasted continuously for a couple of hours since waking that morning. She feels unsteady on her feet but has no other discernible neurological signs or symptoms on further assessment. Her blood results, ECG, and VBG are all unremarkable. It seems to be a case of peripherally-caused vertigo however, a central cause (namely a CVA) needs to be ruled out before the patient can be discharged. In this instance, a HiNTS examination (Head-impulse, Nystagmus, and Test of Skew) was used without the need for CT or MRI, and the patient was successfully discharged home with symptomatic relief and safety netting.

Dr Lumb then proceeded to demonstrate the HiNTS examination. The head-impulse test looks for catch-up saccade as a marker for vestibular-ocular reflex. An abnormal reflex is reassuring. The second and third steps were looking for nystagmus. Any non-reassuring features would require a CT / MRI scan to be performed. It has a sensitivity of 98-100% and specificity 85-96% particularly in the first few days of a posterior stroke.

After deliberation by the judges, the winner, Dr Joanna Lumb was announced.

Attendance

Full members: 20

Junior Doctors: 7

Medical Students: 26