'TO BE, OR NOT TO BE'

BHIVA/BASHH 2010

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Presenting Complaint

- Oct 27 2009, a 45 yr old HIV+ Afro Caribbean man, transferred from Mildmay Hospital
- PC – weight loss, constant right hip pain and back pain x 3/12, no fevers and no cough
- HPC - Lytic lesions noted on pelvis & femur x-rays
- Hypercalcaemia-2.71 (2.15-2.6)
  CD4 731 (400-1600), VL – 609
  (restarted HAART May 2009)

Examination

- BMI 13, bed bound
- Tenderness lateral right pelvis and proximal right femur
- Power hip and knee flexors mildly reduced, extensors marked reduction
- Doubly incontinent (July2009)

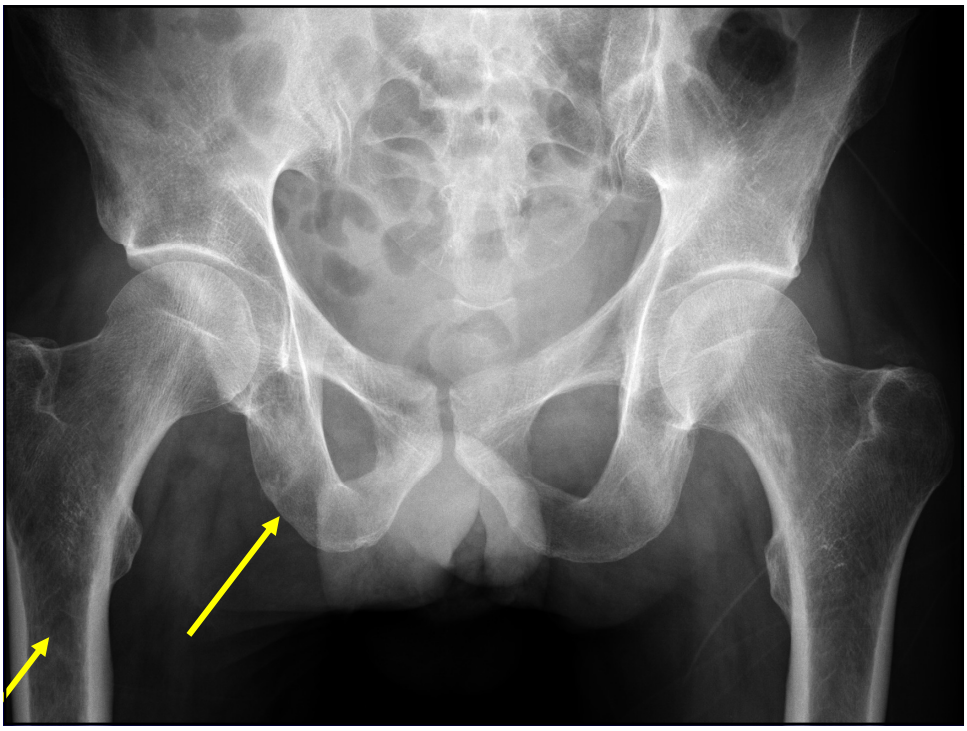
PMH

- 1992 – HIV
- 1992 - Chronic hepatitis B
- 2004 – Wernickes/Korsakoff's syndrome and alcohol dependence
- 2004 - Peripheral neuropathy 2° to alcohol
- 2008 - CVA with right sided weakness
- 2008 – HIV- related neuro-cognitive impairment
- 2009 - Fracture R foot

DH

HAART- Truvada/Abacavir/Kaletra

Allergy - Penicillin



What diagnosis would you consider?

A- Multiple myeloma
B- Secondary metastasis
C- Tuberculosis
D- Trauma

Please vote

Differential diagnosis

- Tuberculosis
- Multiple myeloma
- Sarcoidosis
- Secondary bone metastases
- Lymphoma
- Langerhan cell histiocytosis
- Echinococcus

Investigations

- Ca125, Ca199, AFP, PSA – normal
- beta 2 microglobulin 3.25 (<2.40mg/l)
- Immunoglobulins –All raised. IgA, IgG, IgM. Total protein 107(60-80g/l)
- Immunotyping – New IgM lambda on polyclonal background. New IgG kappa and IgG heavy chain paraproteins detected
- ?Multiple myeloma

Investigations

- BMB – HIV myelopathy with plasmacytosis, No myeloma, DD of TB or lymphoma
- CAP CT – lung fields clear, mediastinal LN, Multiple lytic lesions within lumbar vertebrae, pelvic bones and femur bilaterally, loss vertebral height L4
- Skeletal survey

What other investigation might you require at this point?

A- Spinal MRI

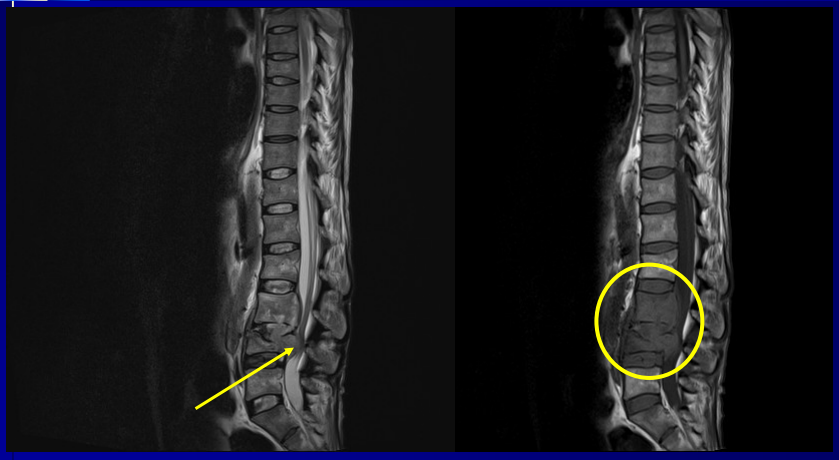
B- Tissue biopsy of affected site

C- TB culture of other body fluids / material

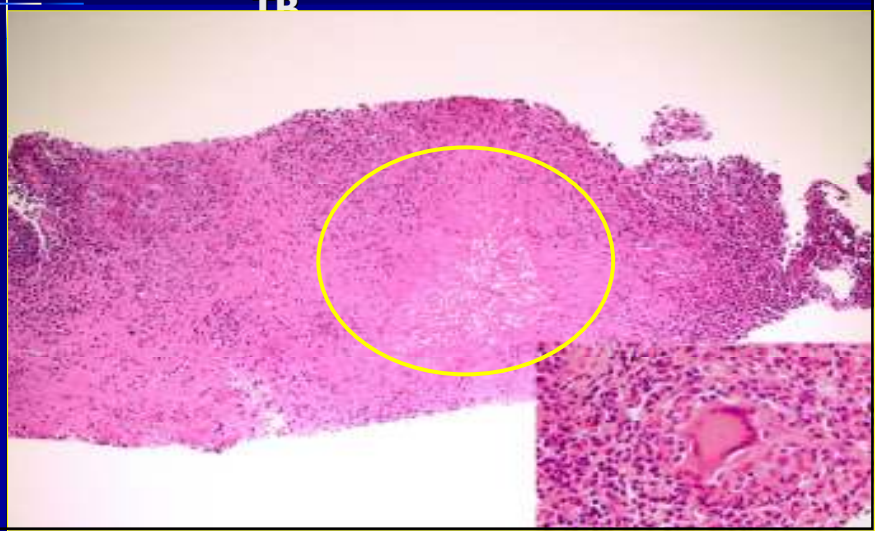
D- All of above

Please vote

Whole spine MRI- heterogeneous lesion around L3/4 extending into epidural space, compression fracture & severe canal narrowing at L4



CT guided lumbar biopsy – AFB negative, Histology caseating granuloma – suggestive of TB



Clinical management

- PEG inserted, high energy drinks and dietitian advice
- Pain team re pain control
- Rehydration and pamidronate re hypercalcaemia-3.14 (2.15-2.6) (TFT/PTH normal)
- Physiotherapy

Clinical management

- Pain improved, used spinal corset
- Samples of urine, blood and stool taken for TB culture
- Dec 4th 2009 TB treatment commenced, Rifater, Ethambutol
- HAART changed to TRU/ABC/EFV

Final outcome

- Jan 15 2010 Culture lumbar bone biopsy

Mycobacterium xenopi

Would the presence of Mycobacterium xenopi alter your treatment in anyway?

A-No change in treatment is required
B-Change in treatment required
C-It doesn't matter either way
D-Don’t know

Please vote

Final Question……

- ……To be or not to be a pathogen…
- M.xenopi was considered a pathogen and on Jan 15 2010 Azithromycin added to treat in preference to clarithromycin due to drug interactions

Mycobacterium xenopi

- Mycobacterium xenopi is an atypical mycobacterium usually isolated in the respiratory tract.
- Endogenous bone infection is rare.
- Usually occurs in immunocompromised patients
- Difficult to isolate and identify as may require prolonged incubation at 37°c or higher

Learning points

- Lytic lesions - Differential diagnosis can include infection
- Remember rare pathogens
- Mycobacterium xenopi pathogen or contaminant?
- Have we excluded Mycobacterium tuberculosis?

Acknowledgements

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