

Testicular Sarcoid

Case presentation

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Case 1

- 34 year old male
- PC: slight discomfort and swelling of both testes for 2-3 years, worse on R for past 2 months
- Otherwise fit and well
- O/E: normal scrotal examination, small palpable bilateral inguinal lymph nodes, axillae and cervical areas clear

■ Investigations:

- USS scrotum and abdomen: multiple hypoechoic areas in both testes, para-aortic lymphadenopathy
- CXR clear
- Open inguinal lymph node biopsy and right testicular tru-cut: non-caseous granulomas in lymph node, no acid fast bacilli, epididymal tissue only on tru-cut

- CT abdomen + pelvis: some small para-aortic lymph nodes only
- ACE elevated at 84 units/l (normal 20-54), 24 hour urinary calcium and bone profile normal
- Referred to chest physician:
 - Differential diagnoses: sarcoid, tuberculosis, or cat scratch fever (keeps ferrets and cats)
 - Tuberculin test
 - Discharged as feeling completely well

Case 2

- 27 year old white male
- Presented with a painful lump in his right testis
- PMH: bilateral anterior uveitis 8 months earlier
- O/E: bilateral “shotty” feeling lumps on both testes
- USS scrotum: multiple hypoechoic lesions within both testes

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UHW Cardiff room2

○ - DC - Testes

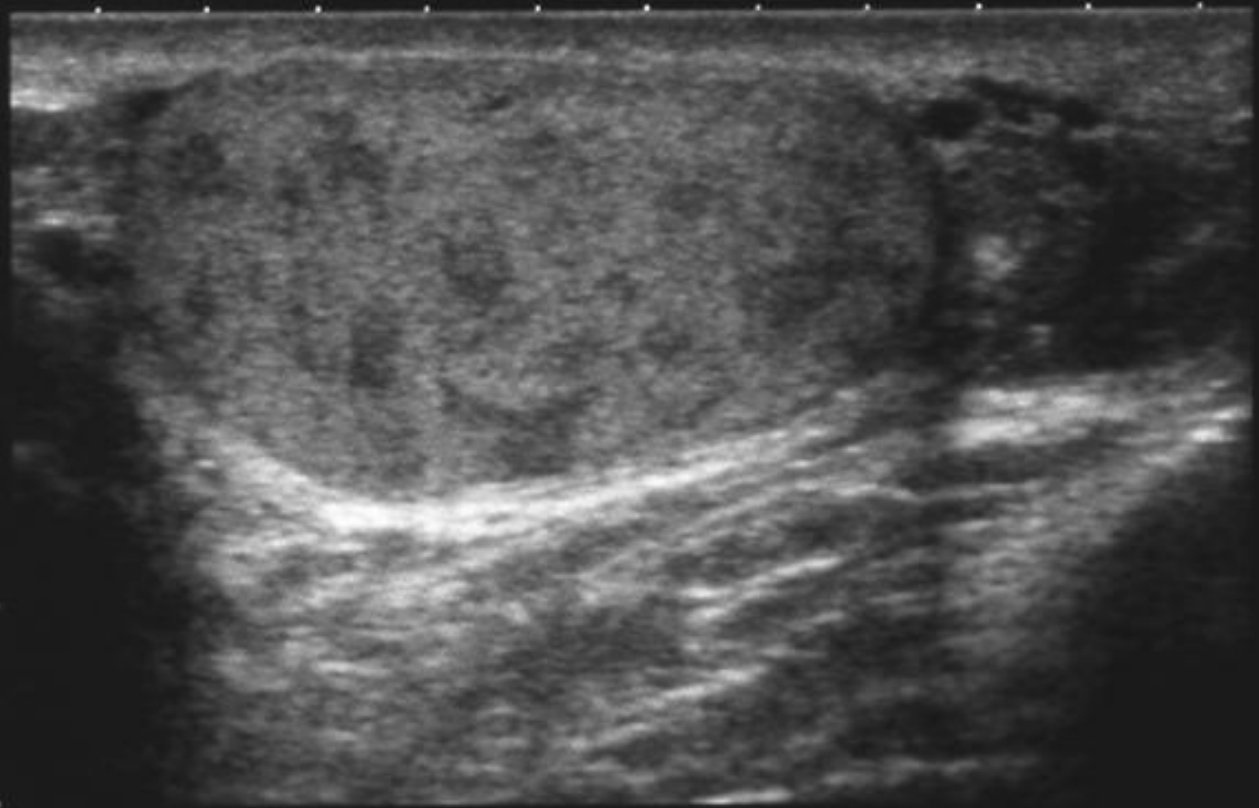
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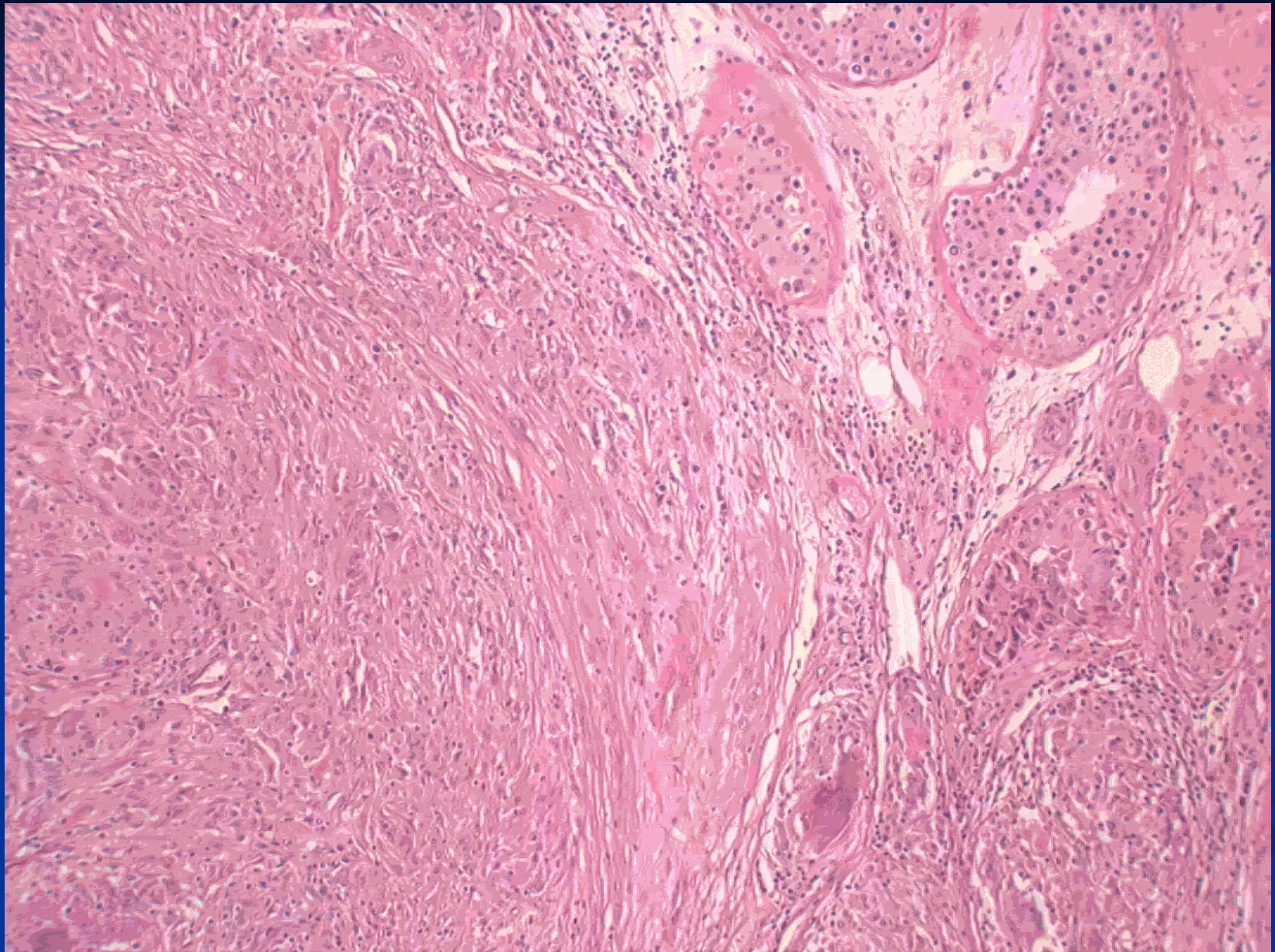


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- Open trans-scrotal biopsies were taken
- Histology showed testicular tissue 90% replaced with non caseating granulomas with multi-nucleated giant cells consistent with sarcoidosis. No evidence of spermatogenesis in residual seminiferous tubules.



- One month later: developed hearing loss, facial numbness and paraesthesia, headaches
- Investigated for neurosarcoid:
 - MRI scanning – normal
 - Baseline anterior pituitary function – normal

- Followed up by endocrinologist:
 - Testosterone – 8 nmol/l (normal range 9-40)
 - Elevated gonadotrophins
 - Azoospermia on semenalysis
- Therapy:
 - Prednisolone 60mg daily reducing regime
 - Alendronate once weekly
 - Testosterone replacement

■ Progress:

- Well, in full time employment
- Semenalysis: count 1.2m/ml, motility 75% after 6/12 of steroids
- Improvement in neurological symptoms of headaches and paraesthesia
- Now off steroids

Sarcoidosis

- Multisystem granulomatous disorder
- Histological diagnosis: non-caseating granulomas
- Black : white ratio 20:1
- Female : male ratio 10:1
- Presentation: bilateral hilar lymphadenopathy on chest radiograph, respiratory symptoms, skin lesions, anterior uveitis

Scrotal sarcoid

- 70% affects epididymis
- Epididymal sarcoid:
 - Recurrent painful epididymitis
 - Ductal obstruction causing oligospermia and infertility

■ Testicular sarcoid:

- Primary gonadal dysfunction, causing low testosterone levels and resultant loss of secondary sexual characteristics
- Leydig cell dysfunction, causing disruption of spermatogenesis
- Unilateral testicular swelling due to sarcoid is clinically and radiologically indistinguishable from a neoplastic cause