A Misdiagnosis of Mumps

Ward C., Kenny G., Feeney E.
Department of Infectious Disease,
St Vincent's University Hospital, Dublin 4

Introduction

The incidence of mumps in Ireland is rising dramatically in Ireland each year with 2,762 cases documented in 2019 in comparison to 573 cases the previous year .[1] As a result; clinicians operating in General Practise and Emergency Departments throughout the country are assessing younger patients with a high index of suspicion which can lead to false diagnoses. Here we detail one such misdiagnosis.

Today we present a case of a 17- year old male rugby player who initially presented to a private Emergency Department with classic symptoms of mumps including; fever, testicular pain, myalgia and lethargy. His symptoms began two weeks previous and had increased in severity during that time. He had no sexual partners and was "fully vaccinated" and had received both MMR vaccines as a child. His brother had been diagnosed with mumps eight months previous. He too was promptly diagnosed with mumps in this institution and discharged home on seven days of Amoxicillin.

Presenting Complaint and Examination

10 days later he presented to the Emergency Department of SVUH with worsening initial symptoms and

- **Gait claudication**
- **new onset fever- 38.6**
- **dysuria,**
- **weight loss**
- **abdominal pain.**

The patient rated his pain a 7/10 in severity and had a GCS of 15/15

Upon examination he was found to have tenderness suprapubically and in the left iliac fossa. Testicular examination and cremaster reflex were unremarkable. Vitals were normal aside from a raised temperature of 38.5 degrees Celsius. Relevant negatives included facial swelling, rash, lymphadenopathy and haematuria

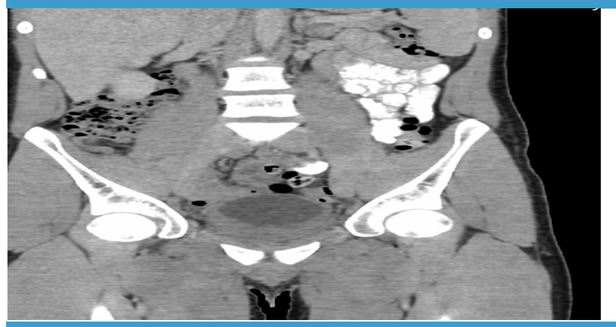
Investigations

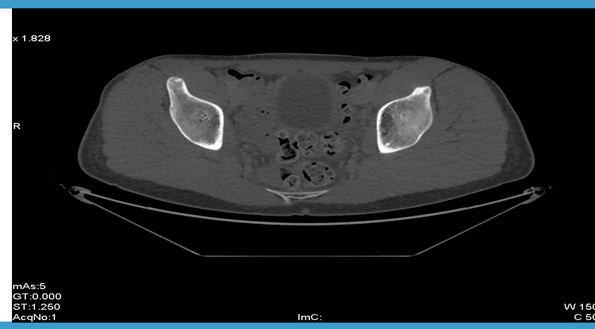
Haematology	
CRP	***190 mg/l***
WCC	9.1
Neuts	5.8
Ig G	***16.8***
Ig M	1.25
Ig A	2.38

Biochemistry	
Blood Cultures	Nil growths
Urine Cultures	Nil growths
CMV	Negative
HIV	Negative
VDRL	Negative
Chlamydia	Negative

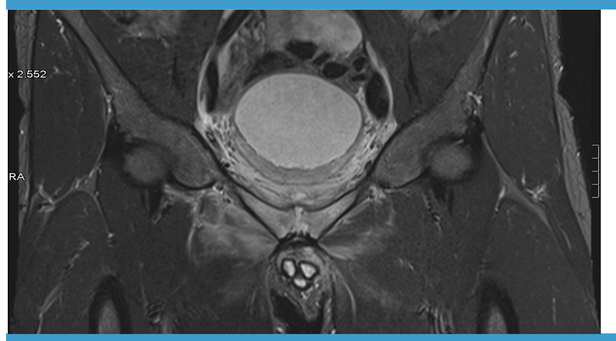
Mumps, Measles and Rubella Serology		
Mumps	***Ig G +***	***Ig M -***
Measles	Ig G +	
Rubella	Ig G +	
EBV	Ig G +	

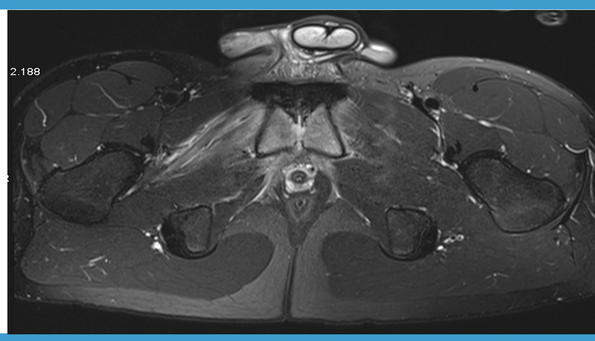
CT Abdomen Pelvis





MRI Pelvis





Results

Mumps serology was consistent with a vaccination or previous infection. All tests for sexually transmitted diseases were negative.

<u>CT Abdomen Pelvis Official Radiology Report:</u> "There is marked thickening of the urinary bladder wall with surrounding infiltration of the perivesical fat. Findings are suggestive of cystitis. No destructive lesions."

<u>MRI Abdomen Pelvis Official Radiology Report:</u> "Appearances consistent with

<u>Septic Arthritis of the Pubis Symphysis</u>

Conclusion

He was commenced on Ceftriaxone 2g IV od and discharged on Outpatient Antibiotic Therapy to complete a six week regimen. A repeat MRI performed at 3 months revealed complete resolution.

***Staph Aureus* is the main causative organism of septic arthritis. It is most common in young athletes particularly football players owing to repetitive over adduction and twisting.[2] For a definitive diagnosis the area in question may be biopsied and cultured; a process that many clinicians feel over intrusive considering the reliability of MRI imaging. Furthermore, early recognition and treatment can prevent progression of disease including the formation of a retropubic abscess. Owing to its variable presentation and rarity it is often misdiagnosed as in this case.**