

### Epididymoorchitis and Pancytopenia Caused by Brucellosis

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*A 15-year-old boy presented with fever and acute painful scrotal swelling. Complete blood count showed pancytopenia. Serum brucella antibodies were positive. Pancytopenia and epididymoorchitis are rare complications of brucellosis and clinicians must consider this entity in the differential diagnosis of adolescents with epididymoorchitis associated with pancytopenia.*

**Key words:** Brucellosis, epididymorchitis, pancytopenia.

Brucella is characterized by the classic triad of fever, arthralgia/arthritis and hepatosplenomegaly (1). Hematologic manifestations of brucellosis include anemia, leucopenia, thrombocytopenia and pancytopenia(2,3). We present a case with fever and acute painful scrotal swelling that was attributed to brucellosis.

#### Case Report

A 15-year-old boy presented with fever and painful scrotal swelling for 5 days. He gave a positive history of ingestion of unpasteurized fresh cheese. Physical examination revealed fever (39°C),

hepatosplenomegaly and left sided tender testicular swelling. The skin over the swelling was red with local rise of temperature. In ultrasonographic evaluation, the size of epididymis and peritesticular fluid were found to be increased bilaterally. Hemoglobin, white blood cell, neutrophil and platelet counts were 9.9g/dL, 2300/mm<sup>3</sup>, 500/mm<sup>3</sup> and 69000/mm<sup>3</sup>, respectively. Bone marrow aspiration specimens showed normocellularity and hemophagocytosis. C-reactive protein value was elevated up to 111 mg/dL. Erythrocyte sedimentation rate was 26 mm/hour. Serum brucella antibodies were positive at a dilution of 640 and blood culture was negative for Brucella. He was administered doxycycline and streptomycin. Epididymoorchitis disappeared on the fourth day and pancytopenia improved in the third week of the treatment.

#### Discussion

Acute scrotal pain does not have an easily identifiable etiology and management can be difficult. The etiology of acute scrotal pain include acute epididymitis (43.0%), torsion of testicular appendage (40.6%), torsion of testis (11.7%) and other pathologies (4.7%)(4). Common causes of epididymoorchitis include mumps, *E. coli*, *K. pneumonia*, *S. aureus* and *Streptococci*. *Brucella* is a rare causative agent of epididymoorchitis reported in 1.6-10.9% of adults. It is very rarely seen in adolescents or children(1,5).

In brucellosis endemic areas, clinicians must consider this possibility in a febrile patient presenting with pancytopenia and scrotal swelling.

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## Incessant Atrial Flutter after Device Closure of Atrial Septal Defect : Successful Radio Frequency Ablation

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*A four-month-old baby presented with failure to thrive and congestive cardiac failure precipitated by a lower respiratory tract infection. He was found to have a large ostium secundum atrial septal defect measuring 18 mm. This was successfully closed percutaneously by a device (Blockaid). A month after the device deployment the child developed typical atrial flutter. Despite rate control drugs the ventricular rate remained 140/min over the next several months. In view of the incessant atrial flutter with fast ventricular response, the child underwent radiofrequency ablation at the age of 2 years. An isthmus block was created which successfully terminated the tachycardia.*

**Key words:** ASD device, Ablation, Atrial flutter, Atrial setpal defect, Radiofrequency.

Atrial septal defect closure using percutaneous techniques has become a standard practice in symptomatic infants(1). The incidence of arrhythmia, following the device closure is rare in those

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without a pre-existing one(2). More so, atrial flutter is uncommnn in infancy(3). We report a case of atrial flutter in a child following device closure which was successfully ablated.

### Case Report

A four-month-old baby (weight 5.5 kg; length 60 cm; head circumference 39 cm) presented with failure to thrive and congestive cardiac failure associated with an episode of lower respiratory tract infection. The child's birth weight was 3030 g and he had perinatal asphyxia and hypoxia induced encephalopathy (stage II) requiring phenytoin.

He appeared lethargic and had subcostal retraction with a sinus tachycardia rate of 140 bpm. There was a widely split second heart sound accompanied by grade 3/6 systolic murmur in the pulmonary area. The liver was palpable 6 cm below the right costal margin associated with mild splenomegaly. Echocardiography revealed a large ostium secundum atrial septal defect (ASD) measuring 18 mm. He underwent percutaneous ASD closure at four months of age under general anesthesia. A 20 mm ASD occluder (Blockaid-Shanghai Shape Memory Alloy Company Ltd, China) was deployed. The post-procedure period was uneventful.

One month after the device deployment the child developed typical atrial flutter with a ventricular rate of 140 bpm. There was no residual shunt on echocardiogram He was initiated on rate control drugs which included propranolol and digoxin. Despite this the ventricular rate remained 140 bpm over the next several months.

At two years of age, due to persistent atrial flutter associated with fast ventricular rate, an