

## Answers to Medical Quiz

A1. Magnetic Resonance Imaging (MRI)

A2. Large left psoas collection is extending into the left inguinal region of the proximal thigh.

A3. Left psoas abscess.

### DISCUSSION

Psoas abscess is a rare condition where pus spreads from a nearby septic focus to the psoas compartment in retroperitoneal space<sup>1</sup>.

Psoas abscess could be classified into primary or secondary, depending on the spread of infection, as well as the causative micro-organism. Primary psoas abscess occurs commonly in neonates as a result of lymphatic or hematogenous spread of infective organism in conditions, such as diabetes mellitus, intravenous drug abuse, AIDS, renal failure and immunosuppression<sup>1,2</sup>.

Secondary psoas abscess occurs mostly in adults as a result of direct spread of infection from abdominal organs or adjacent inflammatory processes, such as Crohn's disease, diverticulitis, appendicitis, Genitourinary tract infection, vertebral osteomyelitis, septic arthritis and infected abdominal aortic aneurysm<sup>3</sup>.

The clinical presentation of psoas abscess is non-specific in most cases. Groin or femoral swelling and limitation of hip movement account up to 30% of the cases. Presentations, such as limping and high fever are rare<sup>3,4</sup>.

The causative micro-organism in primary and secondary psoas abscess is Streptococcus species, accounting for 88%. Other rare pathogenic micro-organisms causing psoas abscess are Klebsiella pneumonia, Streptococcus pneumonia and Escherichia coli<sup>4</sup>.

Ultrasound is commonly used diagnostic tool in psoas abscess. CT scan or MRI could delineate the extent of psoas abscess more than ultra-sound<sup>5,6</sup>.

Blood test may reveal high white blood count, raised C-reactive protein and ESR. Blood culture may be positive in some cases<sup>6</sup>.

The management of psoas abscess includes proper usage of empiric antibiotic therapy (until the final result of pus culture) along with adequate drainage of the abscess cavity. The drainage of psoas abscess either through a percutaneous, open or laparoscopic technique. Percutaneous drainage of psoas abscess could be guided by ultrasound or computed tomography<sup>6</sup>.

### CONCLUSION

**Psoas abscess is a rare condition in neonates and adults. Diagnosis of psoas abscess requires high index of suspicious in cases with non-specific symptoms and signs. Management of a psoas abscess includes usage of empiric antibiotics and drainage of the abscess cavity.**

**Potential Conflicts of Interest:** None.

**Competing Interest:** None.

**Sponsorship:** None.

**Acceptance Date:** 12 February 2017.

**Ethical Approval:** Approved by the Pediatrics Department, Salmaniya Medical Complex, Bahrain.

### REFERENCES

1. Shields D, Robinson P, Crowley TP. Iliopsoas Abscess. A Review and Update on the Literature. *Int J Surg* 2012; 10(9):466–9.
2. Menachery J, Chawla Y, Chakrabarti A, et al. Fungal Liver Abscess in an Immunocompetent Individual. *Trop Gastroenterol* 2012; 33(3): 232–3.
3. Sham M, Singh D. Neonatal Ilio-Psoas Abscess: Report of Two Cases. *J Neonatal Surg* 2014; 3(1): 4.
4. Al-Zaiem MM, Bajuiifer SJ, Fattani MO, Al-Zaiem FM. Bilateral Iliopsoas Abscess Associated with Right Hip Septic Arthritis in a Neonate. *Saudi Med J* 2014; 35(7):743–6.
5. Takada T, Terada K, Kajiwara H, et al. Limitations of Using Imaging Diagnosis for Psoas Abscess in its Early Stage. *Intern Med* 2015; 54(20):2589-93.
6. Ishibashi H, Oshio T, Sogami T, et al. Iliopsoas Abscess in an Infant. *J Med Invest* 2014; 61(1-2): 213-6.