CASE REPORT

VISCERAL LEISHMANIASIS IN ADULTS

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Visceral Leishmaniasis (also known as Kala Azar) is a parasitic infection caused by Leishmania Donovani in the East and Leishmania Infantum in the west. It is prevalent in many countries including India, Bangladesh, Nepal, Africa and part of America. The disease follows chronic course and is usually lethal if left untreated. It has also been reported from different parts of Pakistan, including Northern areas, Districts Mansehra & Abbottabad and Hilly areas of Khyber Pukhtoonkhawah. Most the cases have been reported in paediatric population. Except one case, reported previously from Abbottabad. The present two cases were also seen in adults

Keywords: Visceral Leishmaniasis; Sandfly; Kala Azar

J Ayub Med Coll Abbottabad 2017;29(3):509-10

INTRODUCTION

Visceral Leishmaniasis is a parasitic disease caused by Leishmania Donovani in (LD bodies) the east and Leishmania infantum in the west.¹ It has strong association with poverty.² The parasite is transmitted to human by the bite of sandfly. Epidemiology varies in different parts of world. It is prevalent in the Indian subcontinent and about 200 million people are at risk.3 The disease is most commonly seen in children and has also been reported in adults. Coinfection with tuberculosis, hepatitis B or C and HIV has been reported in adults. 4,5 It has also been reported in post-transplant adults and those treated for hepatitis B and Hepatitis C.6 Cases have been reported from northern areas of Pakistan, Azad Jammu and Kashmir and hilly areas of Khyber Pukhtoonkhawah.^{7–11} Previously one case of adult visceral Leishmaniasis was reported Abbottabad. Here we report two more cases of visceral Leishmaniasis in adults from a different area

CAES 1

A 45 years old female patient from remote areas of District Battagram presented with low grade fever and pallor not responding to conventional treatment for the last two months. She completed treatment for pulmonary tuberculosis two years ago and was sputum negative for Acid Fast Bacilli. Her chest X. Ray was negative for active tuberculous lesions. General physical examination revealed pallor, axillary temperature of 101 °F. No organomegaly was noted. Her blood counts revealed pancytopenia. Bone marrow aspirated from posterior iliac spine under local anaesthesia revealed moderately cellular marrow showing all the three components of haemopoiesis. As much as 10-15 Leishmania Donovani (L.D) bodies were seen per high power field of her bone marrow aspirate (Figure-1). Diagnosis of visceral Leishmaniasis was confirmed by bone marrow examination and no further test was required for it.

CASE 2

A 51-year-old female patient from remote areas of District Battagram, presented with fever and epistaxis for the last one and a half month. She was a diagnosed patient of hepatitis C. General physical examination revealed pallor, patechiea and hepatosplenomegaly. Her complete blood counts revealed bicytopenia. Her chest X-Ray was unremarkable.

Bone marrow was aspirated from posterior iliac spine under local anaesthesia. Marrow aspirate revealed cellular marrow fragments, comprising erythropoiesis with megaloblastic change, unremarkable myelopoiesis and adequate megakaryocytes. The aspirate also revealed intracellular and extracellular Leishmania Donovani bodies (L.D bodies), 25–30 per high power field (Figure-2). The diagnosis of visceral Leishmaniasis was established by bone marrow examination and no further testing was required.

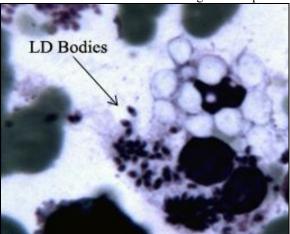


Figure-1: Intracellular LD bodies (arrow) 100X

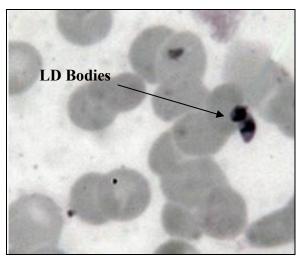


Figure-2: Extracellular LD body (arrow) 100X

DISCUSSION

Although visceral Leishmaniasis has been reported mostly in the paediatric age group, availability of diagnostic tests, referral facilities, increasing treatment trends of hepatitis B and C and the emergence of resistance to anti-tuberculous treatment, are now contributing to the emergence of Leishmaniasis visceral in the immunocompromised individuals in those parts of the world where Visceral Leishmaniasis is prevalent, including Pakistan. A case of visceral Leishmaniasis was reported from the adult population of Abbottabad few years ago. The present two cases belonging to the remote areas of Hazara division reflect the endemicity of visceral Leishmaniasis in these areas. Presence of visceral Leishmaniasis in immunocompromised human reservoir in these areas is a risk factor for the normal population. It also reflects the presence of insect vectors in the affected area. In such circumstances, the paediatric population of these areas is especially at risk. This situation demands effective disease prevention and vector control measures, especially when there are reports of increasing resistance of parasite to the drugs commonly used for its treatment in the past few years

REFRENCES

- Lukeš J, Mauricio IL, Schönian G, Dujardin JC, Soteriadou K, Dedet JP, et al. Evolutionary and geographical history of the Leishmania donovani complex with a revision of current taxonomy. Proc Natl Acad Sci U S A 2007;104(22):9375–93.
- Boelaert M, Meheus F, Sanchez A, Singh SP, Vanlerberghe V, Picado A, et al. The poorest of the poor: a poverty appraisal of households affected by visceralleishmaniasis in Bihar, India. Trop Med Int Health 2009;(14):639–44.
- 3. Chappuis F, Sundar S, Hailu A, Ghalib H, Rijal S, Peeling RW, et al. Visceral leishmaniasis: what are the needs for diagnosis, treatment and control? Nat Rev Microbiol 2007;(5):873–82.
- 4. Bhatnagar S, Gupta AK, Murti K, Pandey K. Co-infection of visceral leishmaniasis and pulmonary tuberculosis: a case study. Asian Pac J Trop Dis 2014;4(1):57–60.
- Adam AOA, Dafalla MMM, Mohammed HAA, Elamin MY, Younis BM, Elfaki MEE, et al. Visceral leishmaniasishepatitis B/C coinfections: a rising necessity to triage patients for treatment. Ann Saudi Med 2014;34(2):143–6.
- Da Silva AA, Barros da Silva DM, Chaves RV, Cintra Sesso R, Pacheco-Silva A, Oliveira CMC, et al. Visceral Leishmaniasis in Renal Transplant Recipients: Study of 30 Cases. J Nephrol Ther 2014;4(5):1000182.
- Mannan MU, Yousaf M, Idrees M, Ghufran SB. Focus of Visceral Leishmaniasis in District Abbottabad. J Ayub Med Coll Abbottabad 2000;12(2):17–8.
- Altaf C, Ahmed P, Ashraf T, Anwar M, Ahmed I. Childhood visceral Leishmaniasis in Muzaffarabad, Azad Jammu and Kashmir: Frequency and response to treatment in 61 cases. J Pak Med Assoc 2005;55(11):475–7.
- Idris M, Farid J, Gul N, Anis-ur-Rehman. Visceral leishmaniasis: adult population of Abbottabad at risk now. J Ayub Med Coll Abbottabad 2010;22(2):214–5.
- Naveed SS, Raza N, Bux H, Firdous M, Rafi B. A Clinicohaematological study of visceral leishmaniasis from northern Pakistan. Med Channel 2011;17(3):54–6.

Received: 18 April, 2017 Revised: -- Accepted: 17 May, 2017

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