

is limited by poor sensitivity, technical expertise, and in the case of culture, slow turnaround time.

<http://dx.doi.org/10.1016/j.ijid.2014.03.761>

Type: Poster Presentation

Final Abstract Number: 45.022

Session: Parasitology and Parasitic Infections

Date: Thursday, April 3, 2014

Time: 12:45-14:15

Room: Ballroom

Case report: A rarely seen cause of brain abscess - neurotoxocariasis



O.R. Sipahi¹, E. Erdem Kivrak¹, M. Korkmaz¹, M. Tasbakan², H. Pullukcu², B. Arda¹, T. Yamazhan¹, S. Ulusoy^{1,*}

¹ Ege University-Faculty of Medicine, Izmir, Turkey

² Ege University Medical Faculty, Izmir, Turkey

Background: Toxocariasis is associated with three syndromes in human beings which are visceral larva migrans, ocular larva migrans and covert toxocariasis. Although neurotoxocariasis is defined as the fourth syndrome of toxocariasis, it is usually considered as a neurological disease which is usually concomitant with visceral larva migrans. In this abstract we report a case of brain abscess caused by toxocariasis.

Methods & Materials: A 56 years-old female patient admitted at our hospital with headache, pain referring to right side of her face and teeth, numbness of forth and fifth finger of her right hand. Cranial diffusion weighted, dynamic magnetic resonance imaging (MRI) revealed a few non-specific intensities at supratentorial white matter, and an approximately 13x12 mm lesion without contrast enhancement which had a significant edema around the white matter in the left frontal cortex. Histologic examination after stereotactic biopsy of the lesion revealed diffuse histiocyte infiltration in histological examination.

Results: A specific agent could not be detected in histochemical examination. Western-blot test toxocariasis in serum and CSF were positive. She was transferred to the infectious diseases and clinical microbiology clinic. Albendazole 400 mg q12 h was started. A total of one month duration for albendazole treatment was planned after regression of the cranial MRI findings on the 14th day of therapy. The patient is recalled for cranial MRI control three months later. However, we found out that she continued albendazole for three months. Compared to the previous MRI, there were two stabilized T2A hyperintense lesions in left cranial hemisphere and minimally regressed lesions at the level of left frontal centrum semi-ovale. There was no relapse after six month follow up. The

Conclusion: The presented case suggests that although rarely neurotoxocariasis may be encountered in the etiology of encephalitis/brain abscess. The patient was successfully treated with albendazole. To our knowledge this is the first reported case of neurotoxocariasis in Turkey.

<http://dx.doi.org/10.1016/j.ijid.2014.03.762>

Type: Poster Presentation

Final Abstract Number: 45.023

Session: Parasitology and Parasitic Infections

Date: Thursday, April 3, 2014

Time: 12:45-14:15

Room: Ballroom

The influence of winter on the prevalence of urogenital schistosomiasis in rural southern KwaZulu-Natal



E.S. Christensen^{1,*}, M. Taylor², S. Gagai², S. Zulu², K. Lillebø¹, S.G. Gundersen³, S.D. Holmen¹, E. Kleppa¹, E.F. Kjetland²

¹ Oslo University Hospital, Oslo, Norway

² University of KwaZulu-Natal, Durban, South Africa

³ Sorlandet Hospital, Kristiansand, Norway

Background: The WHO recommends that praziquantel is administered to all children above four years of age living in schistosoma endemic areas. The frequency of mass drug administration depends on the community's prevalence level. Urine egg count remains the gold standard method for measuring prevalence levels and it is usually done immediately prior to mass treatment. This study aims to explore the influence of seasons on urine egg excretion.

Methods & Materials: In a schistosomiasis endemic area in southern KwaZulu-Natal, South Africa, where the climate is characterized by hot and humid summers (high-transmission-season) and cool, dry winters (low-transmission-season) two cross-sectional studies were performed in randomly selected schools: (1) February to November (2009, 2010 or 2011) urines were collected from females aged 10-12 and 16-23 years (n=1988), (2) May to September 2011 urines were collected from randomly selected school girls aged 4-23 years (n=2371). No mass-treatment had been performed prior to the surveys. Urines were examined for *S. haematobium* eggs by microscopy.

Results: In the 4359 urine samples from females aged 4-23 years (mean 13.35, SD 4.1) 24.6% were *S. haematobium* positive. The number of female pupils with eggs in urine fluctuated in parallel with the transmission seasons. The prevalence was significantly higher immediately after the high-transmission season, summer, 37.8% positive, than in the low-transmission-season, winter, 14.5% positive (OR 0.68, 95%CI 0.62-0.76, p<0.01). There was no influence of age on the association. Likewise, the intensity of infection in the positive girls was significantly lower in winter (Mann-Whitney U Test, p=0.049).

Conclusion: This study shows that the number of subjects excreting *S. haematobium* ova in urine varies by season. The *S. haematobium* prevalence was highest immediately after the high-transmission season. In our study area urines are best collected shortly after the hottest season in order to make decisions about eligibility for mass-treatment, whereas treatment is known to be most efficient when given in the cool season. Further studies are needed to confirm whether egg excretion has to do with factors such as temperature, high-transmission, rainfall, parasite fecundity, or intensified water activity.

<http://dx.doi.org/10.1016/j.ijid.2014.03.763>