Letter to the Editor:

Dear Sir:
Cryptosporidiosis in Sudan

I have read with interest the informative paper on cryptosporidiosis in Nyala, by Adam Ahmed and associates which has appeared in Sudan JMS 2007, Vol 2 No 1 pp 41-43. The authors stated that their 11 cases were most probably of zoonotic aetiology. I think that anthroponotic transmission (inter-human) can not be excluded. It was not indicated in the paper that the suspected water ponds were confirmed by laboratory methods to be contaminated following the wading of the moving nomadic cattle. Cryptosporidium parvum, the species that infects humans and most mammals, is divided into two main groups: one containing human isolates and the other containing domestic animal isolates. Hence, following microscopic diagnosis of Safranine/Methylene blue stained specimens, it is necessary to do DNA sequence analysis to characterize mammalian species in man isolates.

The authors also referred to their work on cryptosporidiosis in Khartoum (published in 1994), but did not indicate the original geographical locations of their patients, in the present 2007 paper. I think if the 1994 cases had included patients from Nyala, then this raises the possibility of endemicity of cryptosporidiosis in that region.

Cryptosporidiosis was fatal in eight immuno-competent individuals from US. These fatal cases represented 15% of a total of 54 patients. Cryptosporidium parvum infection has been reported to cause chronic diarrhoea and malabsorption features in an immuno-competent adult. We think that further studies on the molecular epidemiology and biology of Cryptosporidium are needed. This will help to better understand the evolving virulent behaviour of this organism in both immuno-compromised and immuno-competent hosts.

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To the Editor in-Chief

Regarding the comment by Dr. Abdelmageed Imam about cryptosporidium in Nyala, I do thank him for this comment on the topic which included the following points:
1. Attribution of the isolates to water contaminated by cryptosporidium from cattle.
2. DNA study was not done to specify the origin of cryptosporidium isolates in this paper and our paper published in 1994.
3. It was not indicated in our 1994 paper whether there were patients from Nyala or not.
4. Cryptosporidium parvum causes chronic diarrhoea in immunocompetent as well as in immunosuppressed patients.

In reply to these points nothing in the paper pointed to the cattle as a confirmed source of cryptosporidium isolates. The paper indicated that the disease was associated with cattle and water. This information was obtained from the medical history of the patients. The importance of medical history can not be overemphasize in epidemiology. It is true that molecular genetic study (DNA) of the cryptosporidium isolates could have indicated the source of infection (Humans or animals) but in fact it was not done for simple lack of logistics. There was no mentioning of history of patients coming from Nyala in our 1994 study because the geographical location of study sample was not important according to the objectives of that study.

It is well known that cryptosporidiosis is self-limiting disease in the immunocompetent but intractable in immunosuppressed patients as long as the immunosuppression continues. There was no report of carrier state of cryptosporidiosis in human as far as I can recall.

References
References
Correction

We like to apologize to Dr. Kaballo et al and our readers for the mistakes regarding the labeling of some figures in the case report “Compartment Syndrome of the Lower Limbs: Case Report” which appeared in the last issue of the journal –Sudan JMS 2007; 2[1]: 59-61.

The correct label is shown below:

Fig 4. Tubular necrosis with intra-luminal casts composed of tubular proteinecous eosinophlic material, detached tubular cells

Fig 5. Glomeruli showing mild mesangial expansion