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# *Schistosoma intercalatum* associated with ascaris and trichocephalus: About an observation

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**Abstract**
We report an observation of polyparasitism with *Schistosoma intercalatum* associated with Ascaris and Trichocephalus in a young woman aged 22 years old, nurse, native of Equatorial Guinea, resident in an urban environment with a notion of swimming, who had been presenting a dysenteric syndrome for two days. Clinical examination revealed pain in the right iliac fossa and pelvis. The hemogram showed leukopenia and lymphopenia with normal eosinophilia. The three-day parasitological examination of the stool revealed the existence of eggs of *Schistosoma intercalatum*, *Ascaris lumbricoides*, and *Trichuris trichiura*. Bilharziasis serology was positive with a titre of 1/160 and rectoscopy was without abnormalities. The patient was put on treatment with a good clinical and biological evolution.

**Keywords:** *Schistosoma intercalatum*, *Ascaris lumbricoides*, *Trichuris trichiura*, polyparasitism

## Introduction
*Schistosoma intercalatum* is a trematode that is prevalent in Central Africa and causes mostly rectosegmoid damage. The intermediate host is the bulin. This species is poorly adapted to humans and often occurs in association with other parasitic diseases. In our work, we report an observation of polyparasitism in *Schistosoma intercalatum* associated with Ascaris and Trichocephalus.

## Case report
It is a young woman aged 22 years, nurse, native of Equatorial Guinea, resident in urban areas with notion of swimming, currently in internship in Morocco since January 2014, without pathological antecedents, who presented a dysenteric syndrome for two days. Clinical examination revealed pain in the right iliac fossa and pelvis. The hemogram showed leukopenia and lymphopenia with normal eosinophilia. The three-day parasitological examination of the stool revealed the existence of eggs of *Schistosoma intercalatum*, *Ascaris lumbricoides*, and *Trichuris trichiura*. The 24-hour parasitological examination of the urine was sterile. The serology of bilharziasis was positive with a titer of 1/160, carried out by the method of indirect hemagglutination under soluble antigens of *Schistosoma mansoni*. Rectoscopy was without abnormality. The patient was put on Praziquantel 40mg/kg po in a single dose and Albendazole 400mg in a single dose. The control is scheduled in 2 months for Schistosoma intercalatum (Figure 1) and in 7 days for Ascaris (Figure 1) and Trichocephalus (Figure 2). After two months, the three-day parasitological stool examination was negative with good clinical and biological evolution.

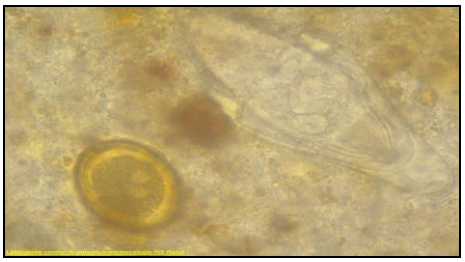

**Fig 1:** *Schistosoma intercalatum* egg associated with *Ascaris lumbricoides* egg

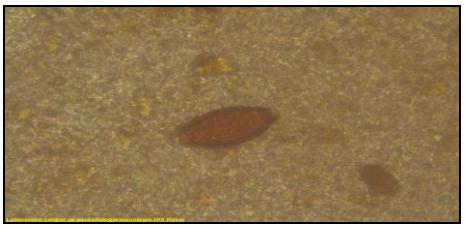

**Fig 2:** Egg of *Trichuris trichiura*

## Discussion
Intestinal polyparasitism is endemic throughout the world and constitutes a real health problem, especially in developing countries. This is due to several factors such as favorable climatic conditions, lack or inadequacy of hygiene and sanitation measures and poverty. In our case, intestinal triparasitism was observed in a young African woman living in an urban area. Our observation is consistent with several studies, including one in Côte d'Ivoire and one in Kenya, which showed that two-thirds of the study population had at least three parasites at the same time [1, 2].

Intestinal polyparasitism in Africa is common in rural areas [3]. This could be due to poor hygiene conditions such as the lack of adequate latrines and drinking water supply and especially to a lack of education and awareness.
The prevalence of *Schistosoma* infections is increased in the presence of geo-helminths according to a study carried out in Brazil by Ribeiro Silva *et al*. [4].

**Conclusion**
Polyparasitism is still rife in tropical zones and prevention is based on health education, improved hygiene conditions and the avoidance of fresh water bathing.

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