SCHISTOSOMIASIS SCREENING IN UNACCOMPANIED CHILD REFUGEES

Aims To assess our strategy for diagnosing schistosomiasis in unaccompanied child refugees in the UK. Schistosomiasis is an easily treatable infection with significant risk of long term complications if not treated.

Methods A retrospective analysis of a prospectively collected database of a health screening clinic for unaccompanied child refugees.

Urinalysis, stool microscopy and full blood count with serum save are performed for all refugee young people attending our clinic. Schistosomiasis serology is requested if microscopic haematuria or eosinophilia are found and stool and urine are negative for ova. Schistosomiasis is diagnosed on positive serology or stool/urine microscopy positive for ova. Treatment is single dose praziquantel.

Our incidence of diagnosed schistosomiasis is compared to published country prevalence data.

Results 232 unaccompanied refugees age 16–18 years (median 17 years) were assessed. 44/232 had eosinophilia >0.4 × 10⁹/L (range 0.4–2.02 × 10⁹/L). Of these 9 had stool positive for S.Mansoni ova, 7 had serum-positive schistosomiasis, 12 had other parasites diagnosed on stool microscopy and 16 tested negative.

20/232 had microscopic haematuria on urinalysis. Only 1/20 had S.Haematobium ova on microscopy. One had negative microscopy but had eosinophilia and serum-positive schistosomiasis.

17/217 (7.8%) patients who provided stool samples tested positive for S.Mansoni ova, 8/17 did not have eosinophilia.

Therefore a total of 25 (10.7%) young refugees (24 male, 1 female) tested positive for schistosomiasis: 1 on urine microscopy, 17 on stool and 7 on serology. Countries of origin were Eritrea (10), Sudan (9) and Ethiopia (6). 10/63 (15%) of Eritrean refugees tested positive, 9/41 (22%) of Sudanese refugees and 6/26 (23%) of Ethiopian refugees. Published country population prevalences of schistosomiasis are 41% for Eritrea and 34% for Sudan.

One further Eritrean patient who had normal stool, urine and eosinophilic and was discharged, subsequently attended a Tropical Medicine clinic and tested serum-positive for schistosomiasis.

Conclusion We are diagnosing significant rates of schistosomiasis. However, the higher published prevalences for the countries of origin suggest cases may be being missed with our current screening method which relies heavily on eosinophilia and microscopy.

Our screening strategy will therefore be adjusted to include schistosomiasis serology on all young refugees from sub-Saharan Africa. We will prospectively assess the impact of this on our diagnosis rate.
Conclusion This pilot study may suggest the presence of sufficient pertussis seroimmunity rates in the studied mothers-neonates pair. Still, there were some failures in immune acquisition probably due to waning of immunity with age. Transplacental passage of pertussis antibodies may not confer similar seroimmunity to pertussis in neonates as in mothers. Wider scale studies would allow better insight into the pertussis immune status of the females in the child bearing period in our country and hence the need for booster immunization during pregnancy.

**REFERENCE**