Female genital schistosomiasis (FGS) in clinical practice: retrospective case-notes analysis of FGS cases with confirmed *S. haematobium* at the Hospital for Tropical Diseases from 1998-2018, with a pragmatic diagnosis and management pathway

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Background: Female genital schistosomiasis (FGS), the genital manifestation of *S. haematobium* infection in women, results in a variety of gynaecological symptoms and longer-term complications. It is estimated to affect three-quarters of women with *S. haematobium*, equating to 56 million women, mainly in sub-Saharan Africa. With increasing migration and tropical travel, FGS will be encountered more frequently in non-endemic settings. Despite this, clinical guidelines for and evaluation of FGS diagnosis and management in non-endemic settings are lacking.

<u>Methods</u>: A retrospective case-notes review was undertaken of patients presenting to the Hospital for Tropical Diseases from 1998-2018 with *S. haematobium* ova detected in terminal urine, or on biopsy. Various descriptive and outcome variables were collected. Specific FGS variables included documented gynaecological symptoms and follow up with sexual health and gynaecology specialists. Results from this study were used to develop a clinical pathway to aid diagnosis and management of FGS.

<u>Results:</u> Overall, 186 patients were included, 62 (33.3%) of whom were women. Four women reported a gynaecological symptom (4/62, 6.5%), including genital lesions, pelvic pain and subfertility. One symptomatic woman was referred for gynaecology follow up (1/4, 25%), and two women were lost to follow up (2/4, 50%). Importantly, gynaecological symptoms were not discussed with most women, despite proven *S. haematobium*.

Conclusions: Given three-quarters of women with *S. haematobium* infection are estimated to have FGS, there is a wide gap in diagnosis of FGS in this non-endemic setting. To help address this, we developed a clinical pathway to improve diagnosis and management of women at risk of FGS (Figure 1). We suggest specific enquiry about gynaecological symptoms for women with any positive investigation for *S. haematobium*. Given potential differential diagnoses we recommend a comprehensive assessment including sexual health screen, gynaecology specialist review and urological imaging for all symptomatic women, with follow up to review outcomes. By formalising a pathway, we aim to improve FGS care in this non-endemic setting.

Figure 1: Female genital schistosomiasis diagnosis and management pathway

