

## Genital Schistosomiasis as A Risk for Genital Cancer

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The possibility of occurrence of ectopic localizations has been observed in parasites of humans, including species of the genus *Schistosoma* - flukes with separate sexes and living within blood vessels.

*Schistosoma haematobium* has its normal habitat in the urinary tract, but ectopic localizations can occur in any part of the body, resulting in specific localized lesions. The genital tract is one of these ectopic localizations [1-9].

With the present editorial containing more recent information we wish to alert the reader to genital schistosomiasis as a potential risk for genital cancer. Since 1899 that the female genital schistosomiasis (FGS) has received the attention of the scientific community. Effectively, the oldest published FGS case was reported in the *Lancet* in 1899 [10]. More recently (during the past five years), the authors [11] have investigated "the impact of schistosomiasis by *S. haematobium* on the high-risk human papillomavirus (HPV) and development of atypical cells in a group of rural Zimbabwean women with confirmed high-risk HPV". Their results have showed that between thirty seven women re-examined, genital *S. haematobium* of a duration of a minimum of five years, was associated with development of high-grade squamous intraepithelial neoplasia, but not with persistent high-risk HPV.

The authors [12] have presented an excellent article on FGS and we emphasise the following excerpts from the text : (i) " the analysis of cases reports and case series shows that in every female the genital organs (vulva, vagina, uterus cervix , uterine body, fallopian tubes and ovaries) can be affected by schistosomiasis"; (ii) four cases of cervical cancer were found associated with schistosomiasis in a series of 38 cervical carcinoma cases; (iii) in

121 cases of cervical schistosomiasis, 15 were cases of invasive cervical carcinomas in which *Schistosoma* eggs were visualized microscopically. The author [13] of the PhD thesis has carried out an investigation using "liquid-based cytology as a tool for diagnosis and risk-assessment of atypical cervical squamous cells in women from *Schistosoma* and HIV endemic populations in South Africa, and their results have showed that " a significant association exists between urogenital schistosomiasis and atypical squamous cells in this population. More than half of the women in this study population had atypical cervical cells and a small proportion also had high grade cervical lesions". On 20 July 2018 [14], the WHO and the Joint United Nations programme on HIV/AIDS (UNAIDS) discussed combining the screening and testing for the human immunodeficiency virus (HIV), sexually transmitted infections and cervical cancer with female genital schistosomiasis to improve their detection and treatment. Accordingly WHO [15] advised that differential diagnosis must be done systematically to screen for cancer of the vulva, vagina and cervix.

In conclusion, we think that has been demonstrated that genital schistosomiasis is a potential risk for genital cancer. So, this pathology may be considered during analysis of women with a history of urogenital schistosomiasis, with at least 4/5 years, principally in endemic areas.

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