

An Update on the Role of Imaging in the Care of Patients with Genitourinary Schistosomiasis: A Systematic Review



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Introduction

- Schistosomiasis is a neglected tropical disease caused by worms of the genus *Schistosoma*.
- Genitourinary schistosomiasis is caused by *S. haematobium* which is endemic to Africa and the Middle East.
- For refugees and asylum seekers from countries where schistosomiasis is endemic, infection with the *Schistosoma* is common.
- Symptoms may begin shortly after arrival or years after migration or not at all.
- Chronic infection may lead to severe fibrosis of the urogenital tract and can cause serious lesions in organs like the bladder, kidney, and/or genital organs.
- Previously published guidance underscores the role of imaging as a risk stratification tool for intestinal schistosomiasis.

Methods

- Five databases were searched from inception to February 2025.
- Terms used in the search strategy were: “schistosomiasis” or “schisto*” AND “haematobium” or “haematob*” AND “CT” or “Computed And tomography” or “ultraso*” or “sonogr*” or “MRI” or “Magnetic AND resonance AND imaging” or “Echo”
- Screening and data extraction was performed by the reviewers.
- Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) was employed.
- Preliminary results were summarized narratively.

Objective

To synthesize available literature around the role of imaging in the evaluation of patients with genitourinary schistosomiasis for use in initial risk stratification and management.

Results and Discussion

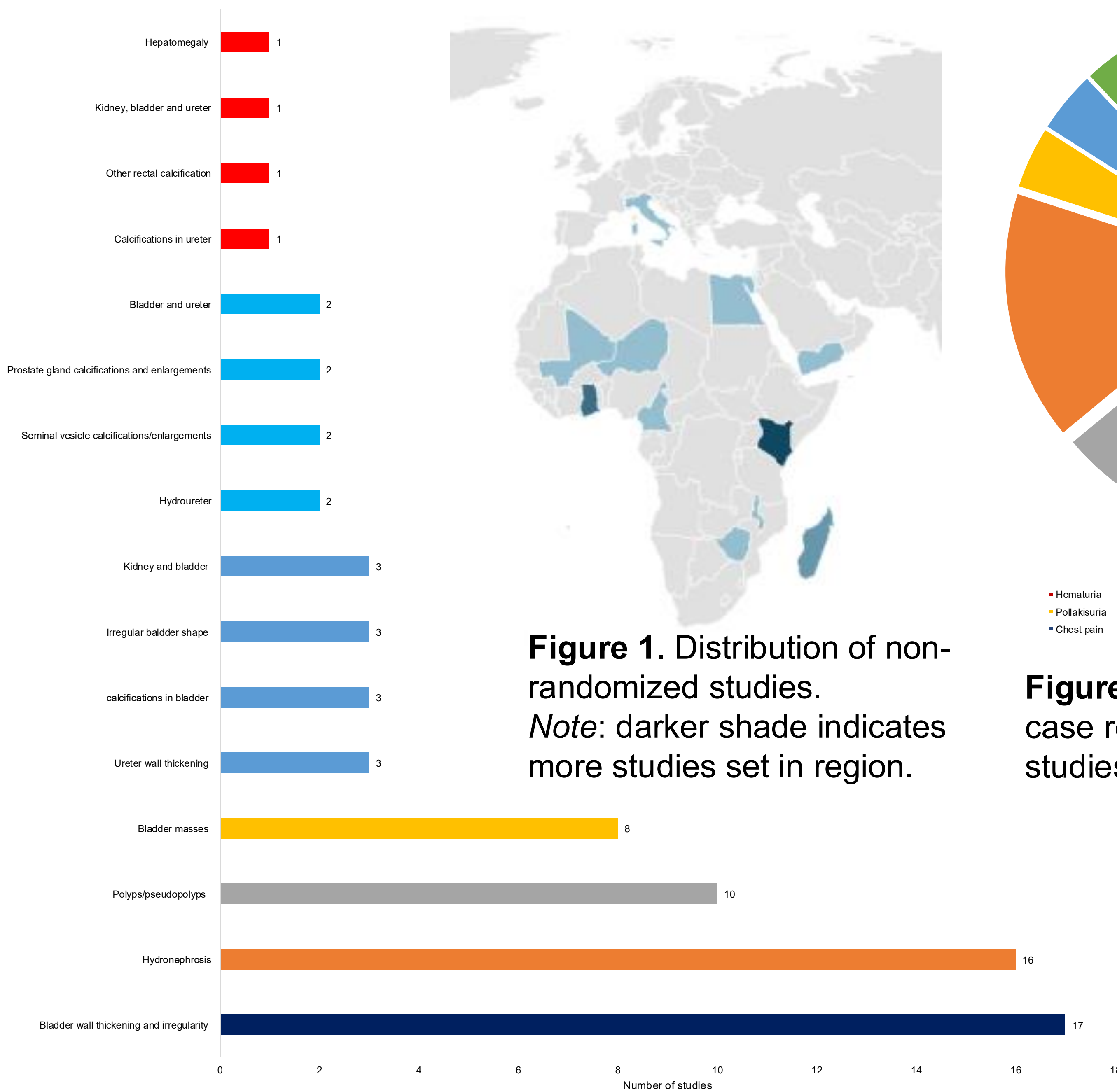


Figure 1. Distribution of non-randomized studies.
Note: darker shade indicates more studies set in region.

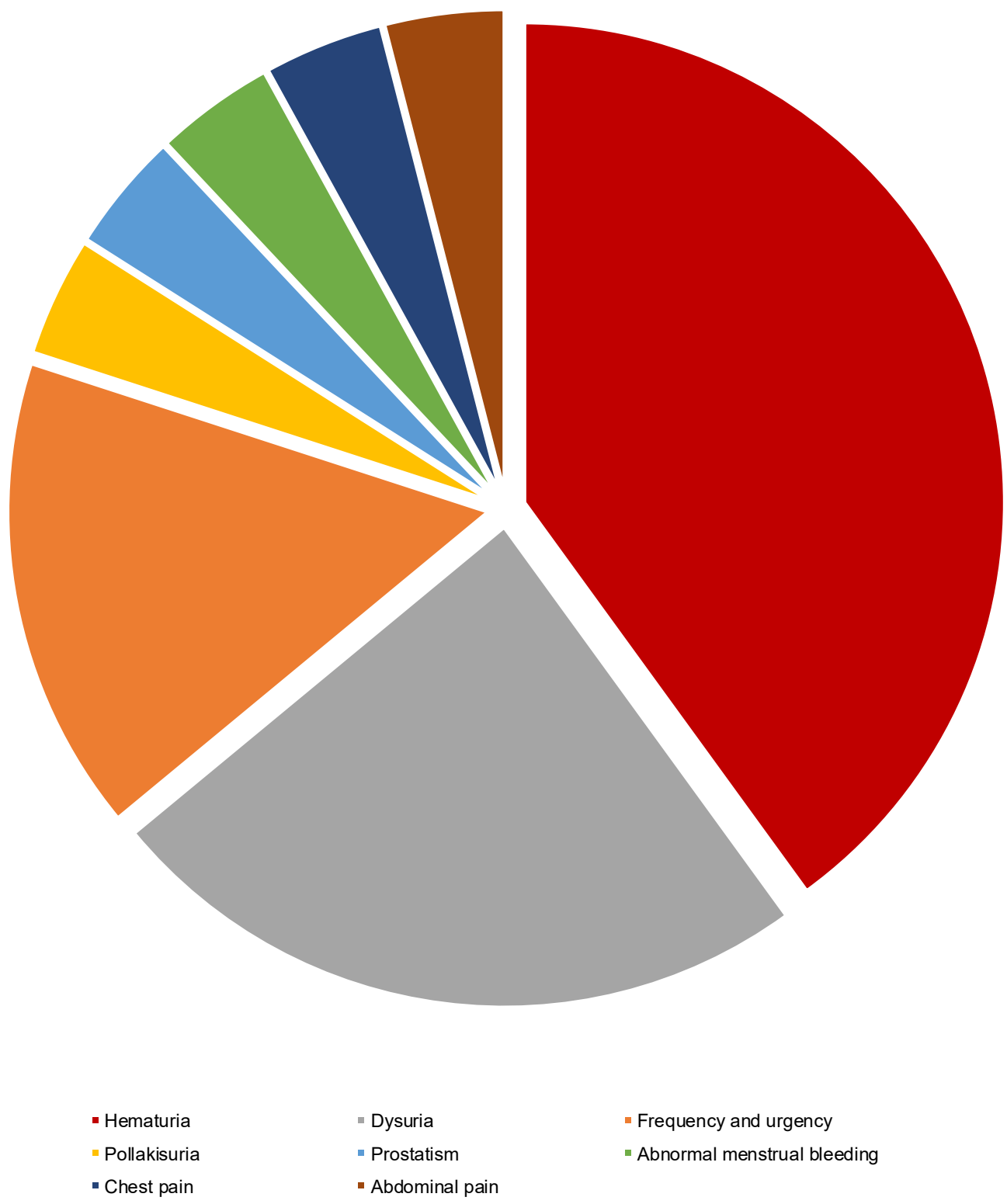


Figure 3. Presenting symptoms in case reports and case series across studies

References



- Both children and adults were represented with the majority of participants under 18 years of age. Most studies had more male participants.
- Most studies were conducted West Africa.
- Ultrasound and CT imaging were the most commonly used imaging modalities.
- Imaging showed bladder wall thickening or irregularities (most common), hydronephrosis, bladder masses, polyps or pseudo polyps in the bladder, calcifications along the urogenital tract, as well as abnormalities in ureter (dilations), and male genital organs.
- For case reports, most patients presented to health care with hematuria and dysuria.
- In countries endemic for the disease, imaging was able to diagnose and provide key information about disease progression, stage, and management.
- Findings can provide insights for developing clinical guidance to ensure timely detection and management of schistosomiasis for newcomers, thereby improving health outcomes.

Figure 2 . Frequency of abnormalities detected across studies