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Letter to the Editor

Misrepresentation of a Visceral Schistosomiasis Report in an Iranian Young Male: Observance of Publishing Conduct in Writing Scientific Articles

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Dear Editor-in-Chief

Recently, we read the article entitled “Improper Report of *Schistosoma haematobium* and Associated Vesical Carcinoma in a Young Man from Iran” with interest published in Iranian J Parasitol (1). The article (Letter to Editor) is unscientific and unethical, however, among the most important findings, several comments were necessary to be completed.

Using some terms like renal tubule (according to the scientific definitions of histology and anatomy, is a set of tiny tubes with closed end), or urinary pain (painful urination), would not change the meaning of these terms. The

reference books of histology and pathology are also using these terms. According to the definition, eosinophilia is the increased number of eosinophils in comparison with the normal number (2). Nourian et al, should be notified that percentage/proportion is multiplied in the whole amount of cells and the result is the same amount of the cells. Prior to that, the percentage/proportion of these cells is the criterion in clinical reports (3).

About the sentence “while the diagnosis of tumors or granulomatous reaction needs thorough microscopic examination of the tissue” in criticism of the “Cystoscopy showed



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four tumors in the bladder and chronic granulomatous cystitis”, it has to be said that this sentence is not scientific because there are many practical and scientific articles that put cystoscopy as one of the most important diagnosing techniques in primary stages of bladder tumor (4).

The sentence “Histopathological examination confirmed *S. haematobium* (Male and Female) where found together on the bladder wall (Related to figure 1 of our paper) (5) mentioned by Nourian et al, the figure does not show two sex type *S. haematobium* (Male and Female). As it is said about this parasite’s life cycle, after migration of male and female worms to mesenteric arteries, the mature worms of both sexes are always seen together except the time of spawning. The sentence “Males have a gynecophoral canal when females are usually located” and the sentence “both males and females must remain together for long periods of time in order for the males to fertilize the females”, the pathology books approves the accuracy of this statement. Due to the size, lateral cut, and the existing structure of the lateral cut (figure 1A of our paper) in the main article, the picture of the male worm (up) and the female worm (down) can be seen and there is no need to explain more on this clear matter (6).

As a reply to the sentence “The size of eggs in figure 2 (B and C of our paper) are almost equal despite different magnifications of the micrographs” one should ask Nourian et al: Can this figure 2 (B and C our paper) mean or show something other than parasite eggs?! As it is noted in the article, the size of the parasite eggs were different (175-190 μm long by 30-40 μm wide) and it is quit logical to see eggs with different size in the picture and most important of all, in figure 2C (Our paper), the egg mentioned is calcified and its measurement is certainly different than figure 2B (Our paper) as a non-calcified egg.

As an answer to “Furthermore, it seems that the terminal spines of the eggs in figure 2F (Our paper) are located at the opposite pole, not at the asterisk” according to the picture related to the terminal spines of this parasite’s eggs, this structure is belonging to terebratorium pole and apical glands and is categorized in the opposite pole of germinal cells and neural mass. As it is shown in figure 2F (Our paper), the spoken structure is in terebratorium pole and apical glands and at the opposite pole, germinal cells and neural mass is located (7).

To the sentence “these lesions look more likely to be granulomatous reactions but not malignancy. Moreover, squamous metaplasia is by definition, different from squamous cell carcinoma (SCC). Although the first condition may be a precursor for the latter one”, is not true that 90% of the bladder cancers are transitional cell carcinoma (TCC) type and mostly occur with SCC? In bladder urothelium, SCC and TCC develops after presence of external object and especially in late stages of urinary schistosomiasis and is caused by metaplasia of the bladder urothelial cells. Furthermore, one of the easiest ways of diagnose is biopsy of the bladder lesions. These pathological lesions are the specific and general signs of bladder cancer followed by urinary schistosomiasis. Also granulomatous lesion’s role by induction of related paths to cyclooxygenase-2, interleukin-1 cytokine, tumor growth factor -B, and tumor necrosis factor-alpha is seen in tumor formation of urinary schistosomiasis and granulomatous lesions are somehow caused by parasite egg’s inflammation near TCC and SCC tumors. Sometimes involvements caused by urinary schistosomiasis will lead to metastasis in *Schistosoma*-associated bladder cancer to the lymph nodes in the area and the only way of treatment mentioned for it is radical cystectomy (8).

Conflict of interest

The authors declare no conflict of interest.

References

1. Nourian A, Hekmatimoghaddam S, Sazmand A. Improper Report of *Schistosoma haematobium* and Associated Vesical Carcinoma in a Young Man from Iran. Iran J Parasitol. 2020;15: 463-65.
2. Cheng L, MacLennan GT, Bostwick DG. Urologic Surgical Pathology E-Book. Elsevier Health Sciences; 2019. 7.
3. Schulte C, Krebs B, Jelinek T, Nothdurft HD, Von Sonnenburg F, Löscher T. Diagnostic significance of blood eosinophilia in returning travelers. Clin Infect Dis. 2002;34: 407-11.
4. Steinberg GD, Sachdeva K, Curti B. Cystoscopy in bladder carcinoma: Overview of cystoscopy, contraindications to cystoscopy, cystoscopy techniques for men. Medscape. 2015.
5. Haghighi L, Akbaribazm M, Arab-Mazar Z, Rahimi M. Vesical schistosomiasis and squamous cell carcinoma associated with *Schistosoma haematobium*. A re-emerging neglected tropical disease in Tehran, Iran. Urol Case Rep. 2020;30:101140.
6. Matsunaga K, Nojima H, Koech D. Dependence of hatching of *Schistosoma haematobium* miracidia on physical and biological factors. Parasitol Res. 1987; 74: 55-60.
7. Boissier J, Mouahid G, Moné H. *Schistosoma* spp. Global Water Pathogen Project, Michigan State University, 2019 .16.
8. El-Bolkainy M, Mokhtar NM, Ghoneim MA, Hussein MH. The impact of schistosomiasis on the pathology of bladder carcinoma. Cancer. 1981;48 (12):2643-8.