**Scholars Journal of Medical Case Reports**
Abbreviated Key Title: Sch J Med Case Rep
ISSN 2347-9507 (Print) | ISSN 2347-6559 (Online)
Journal homepage: https://saspublishers.com

OPEN ACCESS

**Urology**

# Management of Macroscopic Hematurias in the Urology Department of Chu Point G

Dr. Sissoko Idrissa[3*], Koné O[1], Diakité M. L[1], Coulibaly MT[2], Guissé S[2], Berthé A[2], Kassogue A[3], Sangaré D[3], Berthé HJG[1], Tembely A. D[1]

[1]Urology Department, CHU Point G, Bamako, Mali
[2]Urology Department, CHU Gabriel Touré, Bamako, Mali
[3]Urology Department, CHU Kati, Mali

**DOI:** 10.36347/sjmcr.2022.v10i09.011 | **Received:** 15.08.2022 | **Accepted:** 13.09.2022 | **Published:** 15.09.2022

***Corresponding author:** Dr. Sissoko Idrissa
Urology Department, CHU Kati, Mali

**Abstract** **Case Report**

***Introduction:*** Hematuria is the presence of erythrocytes in abnormal amounts in the urine during urination, it is macroscopic if the number of erythrocytes is greater than 500 000 red blood cells / min. considered as a banal sign, particularly the endemic countries of Bilharzia, it remains a frequent reason for consultation and a concern in urology. A total of 71 patients met our inclusion criteria; the mean age was 54.28 ± 18 with extremes ranging from 11 years to 85 years. The sex ratio is 2.22 in favors of men, 70% of our patients had consulted for total hematuria and 49.3% in outpatient. The duration of evolution of hematuria was greater than three months in 42% of cases, cystoscopy was performed in 38% of patients and the selected diagnoses were dominated by bladder tumors (67.9%). prostate adenoma (14%), adenocarcinoma of the prostate (7.2%). Saline bladder irrigation was performed in 63.4% of patients for 1 to 3 days in 53%. The discharge of our patients was done after diagnosis and specific treatment in 38.4% of cases and in 25% of cases after the management of hematuria. ***Conclusion:*** Macroscopic hematuria affects twice as many men as women, bladder tumors and prostatic disease alone are responsible for almost all etiologies. Bladder irrigation and specific treatment play an important role in its management.

**Keywords:** Hematuria, bladder tumor, urinary schistosomiasis, prostate adenocarcinoma, CHU Point G.



## I- INTRODUCTION

Hematuria is the presence of erythrocytes in abnormal quantity in the urine during urination, it is macroscopic if the number of erythrocytes is greater than 500,000 red blood cells per minute in Addis Coptic or clinically the red color of the urine [ 1-3].

Considered a commonplace sign, particularly in countries with endemic schistosomiasis, it remains a frequent reason for consultation and a concern in urology, due to its multiple etiologies which can often reserve a severe prognosis (cancer) and poses a major problem in taking supported in our regions [2, 3].

Its prevalence is estimated at 2.5% in the general population and represents between 4% and 20% of urological consultations [4, 5]. The purpose of this study is to report our experience of care.

## II- PATIENTS AND METHOD

This was a retrospective descriptive study in the Urology department of CHU POINT G, during the period from January 1, 2015 to June 30, 2016, i.e. a period of 18 months, collecting the medical records of 71 patients.

We included in this study, all hospitalized patients with macroscopic hematuria during the study period.

Patients with urethrorrhagia, postoperative hematuria and incomplete record were excluded from this study.

The parameters studied were: age, sex, occupation, length of stay, duration of irrigation, transfusion, paraclinical examinations, etiological

diagnosis, etiological treatment. Data were entered and analyzed using Epi-info 3.5.1 software.

The follow-up of the patients was done in the service until the stop of the hematuria.

## III- RESULTS

During the study period, 71 patients met our inclusion criteria, the average age was 54.28 ± 18 years with extremes ranging from 55 to 91 years The sex ratio was 2.2 in favor of men, 73.2% of the patients were over 50 years old and half lived in Bamako and 67.7% were uneducated (Table 1).

A little less than half (49.3%) of the patients were seen in an outpatient setting and 2/3 of our patients had total hematuria, evolving for more than three months in 42.30%.

The circumstances of appearance were spontaneous in 94.4% of cases, the conjunctivae were well colored in 42.3%, the general condition was good in 47.90%.

Ultrasound was performed in 90.10% of patients, cystoscopy in 38.60% and CT in 39.40%.

The diagnosis retained was bladder tumor (67.90%), benign prostatic hyperplasia (13%), and prostate adenocarcinoma (7.20%) (chart1).

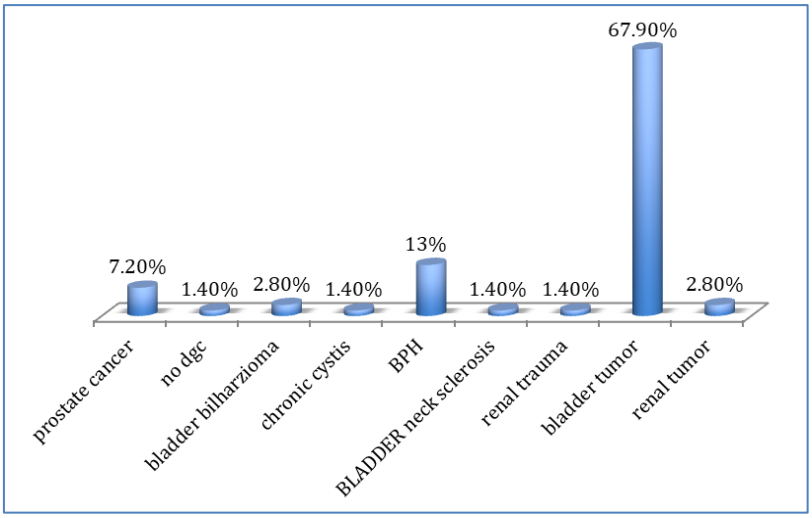
Bladder irrigation was performed in 63.40% of patients for 1 to 3 days in 53.30% (graph 2).

Blood transfusion was performed in 52.10% of patients, 2 bags of which were transfused in 54.10%.

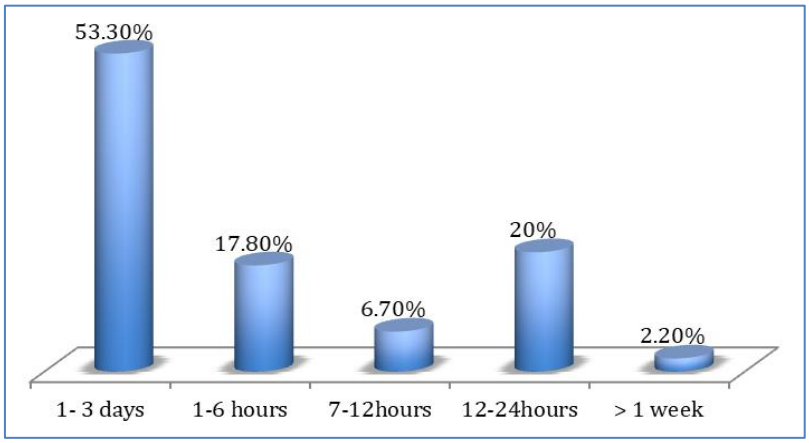
The specific treatment used was lumpectomy and RTUV (Graph 3). The length of hospitalization was one to two weeks in 42.30%.

**Table 1: administrative data**

| **Number** | **71 patients** |
|---|---|
| Sex-ratio (H/F) | 2,2 |
| Mean Age | 54.28 ± 18years.<br>73,2 % > 50 years. |
| geographic Origin | Bamako: 53,5% |




**Graph 1: Diagnosis retained**




**Graph 2: Duration of irrigation**

## IV- COMMENT AND DISCUSSION

Macroscopic hematuria is the presence of abnormally high erythrocytes in the urine. It can be a real care problem. In our study, of the 1080 patients hospitalized during the study period, 71 had macroscopic hematuria, i.e. a frequency of 6.57%, it was twice as common in men as in women and 73.2% of which occurred after age of 50 years for an average age of 54.28 ± 18 years. This prevalence is increasing over the years in the urology department of CHU Point G, which goes from 4.6% in 2006, 5.51% in 2009 to 6.57% in our study [7-9].

In Benin, DANDJLESSA *et al.*, had found that it represented 10.3% of Urological Emergencies, and 8.5% of patients hospitalized for NG KL *et al.*, in Malaysia with a sex ratio of 1.5 in favor of men [11, 12].

Since hematuria is considered a banal sign, most patients consult only after the occurrence of a complication, our patients consulted most for:

- Abundance of hematuria including 70% for total hematuria;
- evolving for more than 3 months in more than 42% of cases,
- and of which 49.30% were seen in an outpatient setting.

According to NG KL *et al.*, the average time between hematuria and diagnosis was 20.1 days [11].

Ultrasound was performed in more than 90% of cases, cystoscopy and CT in only 38% of cases, NG KL *et al.*, performed additional examinations in all patients, A Ouattara *et al.*, Macroscopic hematuria represents 38% of indications for cystoscopy [13].

Cystoscopy is a key examination in the diagnosis of gross hematuria.

Bladder tumor is the first cause of macroscopic hematuria (67.9%) and most often occurs after 50 years (p=0.0008); followed by prostatic hypertrophy (13%) and prostate adenocarcinoma (7%), Due to the hospital nature of the study (hospital of third reference), unlike other studies in Africa where schistosomiasis is the first cause of hematuria (the management of schistosomiasis is most often done in the structures of first and second references).

This in no way contradicts our hypothesis because among the most frequent causes of bladder tumors, urinary schistosomiasis occupies a good place in our context, as well as schistosomiasis and cervical sclerosis.

Among our patients, in 1.4%, no diagnosis was retained, which cannot be considered idiopathic or factitious, because a large part of the workup was not carried out to rule out other causes like Nutcracker syndrome, …. NG KL *et al.*, found benign prostatic hyperplasia, urolithiasis and urinary tract infection in Malaysia.

Bladder irrigation with 0.9% saline and blood transfusion were the 1st stage of emergency management (63.40%), and in 53.3% it was done for 1 to 3 days; Bladder lumpectomy, TURBT, were the most performed etiological treatments, Discharges against medical advice are most often due to a long stay, to the lack of means of the patients.

The duration of hospitalization was between 1 to 2 weeks and was done after diagnosis and specific treatment Recurrent hematuria. They represent 2.2% of cases, where the duration of saline irrigation was greater than 1 week.

Abundant bleeding, resistant to conventional treatment (saline irrigation), other alternatives are described in the literature: intravesical irrigation of: formalin, Alum, Prostaglandin [6], these methods were not used in our series.

## CONCLUSION

Macroscopic hematuria affects twice as many men as women, it is on the rise in our service and represents 6.57% of hospitalized patients. Complementary examinations such as cystoscopy and CT are increasingly used.

Bladder tumors and prostate disease alone account for almost all etiologies. Bladder irrigation and specific treatment play an important role in its management. Modern techniques for the management of recurrent hematuria are still not available in our context.

## BIBLIOGRAPHIE

1. Évangéline, P. (2016). Hématurie : trouver l'origine. *La Revue Du Praticien Médecine Générale*, 30(964).
2. Aurélie, H. (2017). Hématurie. *La revue du praticien*, 67.
3. Collège Français des Urologues. Hématurie ; les référentiels des collèges. *Urologie*, 2016-2018.
4. Yeoh, M., Lai, N. K., Anderson, D., & Appadurai, V. (2013). Macroscopic haematuria: a urological approach. *Australian Family Physician*, *42*(3), 123-126.
5. Hemett, OM, Descombes, E., Eigenmann, J., Betticher, D., & Hayoz, D. (2010). Hematuria: which algorithm for an effective diagnostic strategy?. *Swiss Medical Journal*, (271), 2173-2179.
6. Abt, D., Bywater, M., Engeler, D. S., & Schmid, H. P. (2013). Therapeutic options for intractable hematuria in advanced bladder

cancer. *International Journal of Urology*, *20*(7), 651-660.

7. Maiga, MMM (2009). Macroscopic hematuria: Etiological and therapeutic aspects in the urology department at the CHU du Point-G. *Thèse de méd*, 2009 FMOS.
8. Samaké, A. (2006). Les etiologies de l'hematurie macroscopique dans le service d'urologie du chu de point-G. *Thèse de méd*, 2006 FMOS.
9. Dombo. (2005). Prévalence de la bilharziose urinaire en zone de riziculture au Mali. *Mali Médical*, 20(3).
10. Khadra, M. H., Pickard, R. S., Charlton, M., Powell, P. H., & Neal, D. E. (2000). A prospective analysis of 1,930 patients with hematuria to evaluate current diagnostic practice. *The Journal of urology*, *163*(2), 524-527.
11. Ng, K. L., Htun, T. H., Dublin, N., Ong, T. A., & Razack, A. H. (2012). Assessment and clinical significance of haematuria in Malaysian patients-relevance to early cancer diagnosis. *Asian Pacific Journal of Cancer Prevention*, *13*(6), 2515-2518.
12. Dandjlessa. (2015). *Médecine d'Afrique Noire*, 62(7).
13. Ouattara, A. (2015). Indication des cystoscopies. *Médecine d'Afrique Noire*, 62(6).