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### **Original Research Article**

# Epidemioclinical, Etiological and Therapeutic Study of Paraphimosis at the Centre de Santé de Référence (CSRéf) of Markala, about Five Cases

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## **Abstract**

The aim was to study the epidemiological, clinical and therapeutic aspects of paraphimosis at the CSRéf of Markala. *Patients and Methods*: We conducted a prospective and descriptive study of five patients who had consulted for paraphimosis in the operating theatre of the Markala referral health centre from 1<sup>er</sup> January 2019 to 31 December 2021, i.e. a two-year period. Our study included all patients who consulted for paraphimosis at the CSRéf of Markala with a usable medical file. The criteria for non-inclusion were: Phimosis without other pathologies of the penis. The records were not usable, as this was a prospective study. *Results*: The frequency of paraphimosis was 2.1% out of 235 patients hospitalized and operated on at the CSRéf of Markala during the study period. Four of our patients had no particular medical or surgical history, but the oldest of our patients had already undergone a hernia repair and an appendectomy at the time; the average age of our patients was 15.3 years, with extremes ranging from 3 years to 53 years. However, we note that there is no specific age of onset of paraphimosis The treatment received by all our patients was posthectomy. No major complication was noted in our patients, however we deplore a loss of sight in two of our patients for a long term follow-up in order to identify other unknown aspects in the management of paraphimosis. *Conclusion*: Paraphimosis is a true urological emergency that occurs in uncircumcised men when the foreskin is trapped behind the glans crown, which can lead to long-term strangulation of the glans and compromise its vascularity hence their immediate management paraphimosis.

**Keywords:** urinary pathologies, paraphimosis, health Markala-Mali.

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## Introduction

Paraphimosis is a disease of the penis characterised by an oedema of the foreskin which remains retracted behind the glans. It is a medical/surgical emergency as there is a risk of necrosis of the glans and part of the shaft of the penis. It is important that clinicians recognise this condition early, as it can lead to gangrene and amputation of the glans penis. Prompt urological intervention is indicated. Always check that there is no encircling foreign body

compressing the venous return, such as a ring, elastic band or hair [1].

In infants and young children, paraphimosis usually results from self-handling by the child or inappropriate retraction of the foreskin by the caretaker in ill-advised attempts at cleaning (2). In sexually active adolescents or adult men, sexual relations are favourable factors (3), hence the interest in carrying out an epidemiocical and therapeutic study of paraphimosis at the CSRéf in Markala.

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#### **MATERIALS AND METHODS**

This was a prospective and descriptive study of five patients who consulted for paraphimosis and were treated in the operating theatre of the Markala reference health centre from 1<sup>er</sup> January 2019 to 31 December 2021, i.e. a two-year period,

Our study included all patients who consulted for paraphimosis at the CSRéf of Markala with an exploitable medical file,

We studied age, surgical history, frequency of paraphimosis among other pathologies. The criteria for non-inclusion are mainly: Phimosis, other pathologies of the penis. Unusable records as this is a prospective study.

### **RESULTS**

From 1<sup>er</sup> January 2019 to 31 December 2021 we have collected five cases of paraphimosis; The average age of our patients was 15.3 years with extremes ranging from 3 years to 53 years. The 0-5 age group was the most represented with 3 cases or 60%.

Table 1: Frequency of paraphimosis among other urological emergencies

Pathologies	Frequency	Percentage
Inguinal hernia	35	50,7
Phimosis	11	15,9
Renal colic	10	14,5
Acute appendicitis	06	08,7
Paraphimosis	05	07,3
EMB trauma	02	02,9
Total	69	100

Table 2: The frequency of paraphimosis among other urological diseases

Pathologies	Frequency	Percentage		
Adenoma of the prostate	66	38,6		
Bladder tumour	54	31,6		
Umbilical hernia	22	12,8		
Communicating	14	08,2		
hydrocele				
Paraphimosis	05	02,9		
Varicocele	05	02,9		
Testicular cancer	03	1,8		
Cryptorchidism	02	1,2		
Total	171			

**CHART 1: Age distribution of patients** 

Table 3: Distribution of patients according to time to consultation

Time in days	Frequency	Percentage
[0-2j[	3	60
[3-5j[	1	20
[6and more [	1	20
Total	5	100

**CHART 2: Distribution by mode of recruitment** 60% of our patients were received in emergency

Table 4: Distribution according to length of stay in hospital

Duration of hospital stay in days	Frequency	Percentage
0 2j	4	80
3 days and more	1	20
Total	5	100

#### Some iconographies







#### COMMENT AND DISCUSSION

Paraphimosis is a disease of the penis characterised by an oedema of the foreskin which remains retracted behind the glans. It is a real urological emergency because there is a risk of necrosis of the glans and part of the penis sheath. In the course of this study, we collected two hundred and thirty-five (235) patients, i.e. 2.1% of cases of paraphimosis in the urology department of the Markala Health Centre during the study period.

Many causes of paraphimosis have been identified, such as trauma to the area, failure of the foreskin to return to its normal position after urination or washing, or infection, which may be due to poor personal hygiene [6].

Four of our patients had no particular medical or surgical history, but the oldest of our patients had already undergone a hernia repair and an appendectomy. The average age of our patients was 15.3 years with extremes ranging from 3 years to 53 years. The most frequent delay in consultation was [0-2 days], i.e. 60% of our patients. 60% of our patients were seen in the emergency room.

The treatment received by all our patients was posthectomy with a hospital stay of less than 48 hours which is in line with the literature [3, 4, 5]. There are many treatment options available for conventional paraphimosis:

The Dundee technique (the most commonly used); The ice glove method; Reduction with hyaluronidase and The use of granulated sugar.



None of our patients had major postoperative complications, but we regret that two of our patients lost their sight for long term follow-up and that other unknown aspects of the management of paraphimosis were identified.

Conflict of Interest: None

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