

## Acute Paraphimosis in a 9-Year-Old Boy: A Case Report and Management

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### Abstract

Paraphimosis is occurred as a disease when the foreskin is trapped behind the corona of the glans penis in an uncircumcised boy. This case is presented in a 9-year-old boy with history of self-injection of foreign materials into his penis with toy medical syringe while playing at home.

**Keywords:** *Paraphimosis; Treatment; Children; Surgical Management*

### Introduction

Paraphimosis is a disease when the foreskin is left retracted behind the glans penis. It is an urological emergency with retraction of the foreskin of an uncircumcised boy. The serious consequences from the event such as edema, painful symptom, distal venous congestion, and necrosis [1,2]. We present a case with acute paraphimosis in a 9-year-old uncircumcised boy with management approaches.

### Case Report

A 9-year-old-boy presented with a painful swelling of the glans penis including retraction of foreskin behind the glans penis. He had a history while playing at home with self-injection of the foreign liquid materials by toy medical syringe. He had unintentionally retracted the foreskin and could not reduce it for 8 hours. Initial clinical presentation at outpatient clinic with huge swelling and intractable edema of the glans penis, retraction of foreskin behind the glans penis, exudative fibrin covering urethral opening and acute urinary retention. Surgical intervention under general anesthesia and dorsal penile nerve block was performed by dorsal slit of the constricting prepuce and a circumcision solved the clinical problem. The patient was discharged home with good clinical condition after observation in postoperative period for 6 hours. There was no recurrence during short postoperative follow-up period.

### Discussion

Paraphimosis is encountered in general practice with a cause of urological emergency. It is occurred in 0.7-1% of uncircumcised boys [4]. The mostly cause occurred with iatrogenic factors when the foreskin is retracted for cleaning, penile examination, placement of urinary catheter, cystoscopy, after insertion a Foley catheter [3]. Self-inflicted injury to the penis such as penile erection, piercing into glans with ring, self-injection with foreign materials [5,6]. The cause of paraphimosis in our case was unintentional retraction of foreskin by himself while playing at home with self injection into his penis with toy medical syringe. If left for untreatment for a prolonged period, constriction of glans penis may affect with the impeding of lymphatic and blood flow and sequelation could be occurred with penile

ischemia and gangrene and may follow with penile amputation in finally [7]. The most common clinical presentation of paraphimosis including edema of penis, painful penis, and inability to pull back the foreskin. The clinical progression is turned to get dark red in color at tip of penis, decreased urinary flow and painful voiding may be presented in the patients with paraphimosis [1-5]. In case with failure of nonoperative management, clinical presentation with swelling of penile shaft and glans penis and discoloration was occurred, urgent surgical management with dorsal slit, reduction of paraphimosis including with circumcision was performed in order to avoid consequence of constriction of glans penis [2]. The objective in management in order to reduce the edema of the glans penis and penile shaft including retracting the foreskin back to its original anatomic position. Suggestion with non-invasive methods for management of paraphimosis such as manual reduction, pharmacologic injection with hyaluronidase, granulated sugar using [8-11]. Penile nerve block, topical analgesic agents, oral/intravenous narcotic drugs are often used during the procedure in order to decrease painful symptom. In our case, penile nerve block with 0.5% Marcaine was used prior to operative procedure. Proposed ice glove technique as non-invasive adjunct method to reduce paraphimosis by combination of cooling and compression to decrease penile edema [12]. Surgical therapy becomes the treatment of choice by necessity when there is failure of nonoperative method. Operative procedures including puncture technique to puncture the edematous prepuce with hypodermic needle with blood aspiration of the tourniquet prepuce was purposed to reduce paraphimosis. Urgent dorsal slit with subsequent circumcision should be performed if there is failure of these methods [13-15]. In our case, we proceed to solve the problem with urgent dorsal slit and circumcision in order to avoid ischemic change.

### Conclusion

In conclusion, paraphimosis is an important clinical presentation of urologic emergencies. There are an opportunity to turn to be potential catastrophic penile injury, ischemic and necrosis of the glans penis in finally. Prompt urgent surgical management should be performed if there is failure in reduction of paraphimosis in order to preserve viability of both glans penis and penile shaft.

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