



## NEGLECTED PARAPHIMOSIS WITH HEMORRHAGIC MUCOSAL SUFFUSION THAT DEVELOPS INTO GLANS PENILE NECROSIS : A RARE CASE REPORT

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### Abstrak

Parafimosis adalah kondisi darurat urologi di mana preputium yang sempit ditarik ke atas glans penis, menyebabkan tekanan pada batang penis, nyeri, dan pembengkakan. Kondisi ini dapat menyebabkan iskemia dan nekrosis jaringan. Kasus langka Parafimosis yang Terabaikan dengan Suffusi Mukosa Hemoragik yang Berkembang menjadi Nekrosis Glans Penis pada seorang anak laki-laki berusia 13 tahun dengan autisme dilaporkan. Pasien mengeluhkan Suffusi Mukosa Hemoragik dan pembengkakan pada glans penis. Pemeriksaan fisik menunjukkan Hemoragik di sekitar sulcus coronarius dan glans penis yang membengkak. Evakuasi bekuan darah dilakukan, mengungkap nekrosis di area tertutup oleh bekuan darah. Pengektomi dan rekonstruksi uretra dilakukan karena tidak ada jaringan yang dapat dipertahankan. Parafimosis sering terjadi pada anak dan orang dewasa non-sunat, menyebabkan nekrosis glans jika tidak diobati dengan efektif. Penanganannya bervariasi sesuai kondisi klinis pasien, tetapi perlu ditangani segera karena keterlambatan dapat menyebabkan nekrosis.

**Kata Kunci:** *Parfimosis, nekrosis glans, edema glans, parafimosis terabaikan, hemoragik glans*

### Abstract

*Paraphimosis is a urological emergency condition where the narrow foreskin is retracted over the glans penis, causing compression on the shaft, pain, and swelling. This can lead to ischemia and tissue necrosis. We present a rare case of Neglected Paraphimosis with Hemorrhagic Mucosal Suffusion progressing to Glans Penis Necrosis in a 13-year-old boy with autism spectrum disorder. The patient presented with complaints of Hemorrhagic Mucosal Suffusion and swelling of the glans penis. Physical examination revealed Hemorrhagic Suffusion around the coronal sulcus and a swollen glans penis. Blood clot evacuation was performed, revealing necrosis in the area covered by the blood clot on the glans penis. Penectomy and urethral reconstruction were carried out due to the lack of salvageable tissue in the distal Hemorrhagic Mucosal Suffusion. Paraphimosis commonly occurs in uncircumcised children and adults, potentially leading to glans necrosis if not effectively treated. Management varies based on the patient's clinical condition, but it requires prompt attention as delayed treatment may result in necrosis.*

**Keywords:** *Paraphimosis, glans necrosis, glans edema, neglected paraphimosis, glans hemorrhagic*

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## INTRODUCTION

Paraphimosis is a critical urological emergency characterized by the retraction of the narrow end of the prepuce over the glans penis, resulting in compression of the penile shaft. This condition induces significant pain and swelling of the penis, and if left unaddressed, it can lead to severe complications (Mahaputra et al., 2023). The constriction of the blood vessels in the affected area may result in ischemia, disrupting the blood supply to the tissues distal to the compression site. This compromised blood flow can subsequently lead to tissue necrosis, a serious consequence that requires immediate medical attention (Offenbacher and Barbera, 2019).

In a particularly rare case, we encountered and documented a patient with Neglected Paraphimosis that progressed to an alarming stage characterized by Hemorrhagic Mucosal Suffusion, ultimately culminating in Glans Penile Necrosis. Neglected paraphimosis refers to cases where the condition has been overlooked or not promptly treated, allowing it to progress to more severe stages.

Hemorrhagic Mucosal Suffusion in paraphimosis involves the leakage of blood into the mucosal tissues, intensifying the ischemic conditions and exacerbating the potential for tissue damage. This complication further highlights the urgency of addressing paraphimosis promptly to prevent the escalation of complications.

The development of Glans Penile Necrosis underscores the gravity of the situation, emphasizing the irreversible damage that can

occur when blood flow is severely compromised for an extended period. Necrosis refers to the death of cells and tissues, and in the context of the glans penis, it signifies the loss of viable tissue in this critical region (Sato *et al.*, 2019).

This case serves as a poignant reminder of the importance of early recognition and intervention in paraphimosis cases. Timely medical attention, such as reduction techniques to return the prepuce to its normal position, is crucial in preventing the progression to severe complications like hemorrhagic mucosal suffusion and glans penile necrosis. Additionally, this rare case underscores the need for increased awareness among healthcare professionals and the general public about the potential dangers associated with neglected paraphimosis and the importance of seeking prompt medical care.

## CASE PRESENTATION

A 13 years old boy with medical history of autism spectrum disorder come to hospital with chief complaint swollen glans penis associated with an ischemia-related hemorrhagic mucosal suffusion. the family also said that the patient had often scratched his penis for the last 2 weeks. Upon physical inspection, it was discovered that there was a blood clot around the sulcus coronarius and that there was a narrow band of tissue directly behind the penile head. (Figure 1) Neurological examination revealed lost tactile sensation in the glans penis. Laboratory tests and radiography are not typically required in the assessment of paraphimosis, and physical examination have demonstrated no evidence of urinary obstruction.



Figure 1. Glans Penis with Hemorrhagic Mucosal Suffusion

The decision was made to undertake emergency surgery. Hemorrhagic Mucosal Suffusion evacuation was performed and necrosis was seen in the area covered by the Hemorrhagic Mucosal Suffusion to the glans penis. Partial penectomy and urethra reconstruction was performed because

there is no viable tissue in the area that covered by Hemorrhagic Mucosal Suffusion. (Figure 2) The patient evolved favorably and was discharged at 48 hours with an urethral catheter that was removed after 7 days.



Figure 2. Partial penectomy and urethra reconstruction

## RESULTS AND DISCUSSION

Paraphimosis is an urological emergency that typically affects uncircumcised children and

adults (Offenbacher and Barbera, 2019). It happens when the narrow tip of the prepuce is withdrawn behind the glans and constricts the

penile shaft, resulting in painful glans vascular engorgement and distal penile edema (Bettocchi *et al.*, 2023). If the problem is not treated effectively, it can develop to infection and vascularization compromise, which can lead to glans necrosis (Sato *et al.*, 2019). In this case, the patient had never been circumcised. The patient also has the repetitive behavior that is common in autistic syndrome, which is shown by the repetitive motion of scratching the penis. The chief complaint that brought the patient to the emergency room was blood clot and edema in the glans penis.

Necrosis of the glans as a consequence of paraphimosis is an uncommon occurrence. As stated in various situations, the management in dealing with paraphimosis that develop into glans necrosis is variable and corresponds to the clinical condition of the patient. Palmisano *et al.* described manual traction to reposition the foreskin (Palmisano *et al.*, 2018). Following this action, topical antiseptics and hyaluronic acid ointment were used. In another case, after gentle pressure reduction failed, Barmadisatrio *et al.* conducted a dorsal slit on the constricted prepuce (Barmadisatrio, Sutarja and Wiyogo, 2021). Circumcision followed this action 5 months later. Other actions that can be taken if paraphimosis has caused extensive necrosis are glans amputation and urethral reconstruction, this was shown in the case of Yoeli Antonio (Yoeli Antonio, 2020). In this case Partial penectomy and urethra reconstruction was performed.

## CONCLUSION

Paraphimosis is a urological emergency that must be managed right away because delay in treatment can cause necrosis. the management in dealing with paraphimosis that develop into glans necrosis is variable and corresponds to the clinical condition of the patient.

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