

Strangulation Injuries of The Penis

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ABSTRACT

Objectives: To report the series of cases of penile strangulation injuries which were managed in our setting. **Patients and Methods:** 5 cases of penile strangulation were managed in our department during last five years. Three patients were admitted through emergency and 2 patients were admitted through out patient department. Complete history was taken and physical examination done. Type of strangulating agent and duration of strangulation were documented. Treatment was individualized for every patient. **Results:** The age range of the patients was 17 to 58 years. Duration of strangulating agent was from 24 hours to 6 months. In 1 patient, who had strangulation due to string, constricting agent

divided and recovery was uneventful. Two cases having strangulation due to wheel bearing, one needed debridement of the glans and later on skin grafting of penile shaft, results were satisfactory. Other case, whose penile shaft wound was debrided, was planned for grafting but he left against medical advice. Two patients, who had amputation of glans showed satisfactory outcome after revision of stumps. **Conclusion:** Penile strangulation injuries are very serious leading to even loss of organ. These should be recognized early and prompt removal of strangulation agent is necessary to prevent serious complications. **Key Words:** Strangulation injuries, penis, erotic purposes

INTRODUCTION

Strangulation injuries of the penis are rare but serious injuries. If not recognized and managed early, can lead to serious complications including gangrene and amputation of penis.¹ Various metallic and non metallic devices are placed on penis for fun, to increase sexual performance or for self erotic intentions and others.^{1,2} These objects may be ball bearings, rings, condoms, plastic bottle neck, hairs etc. Application of these devices may present a challenge to surgeon for opting the mode of treatment.

MATERIAL AND METHODS

This a retrospective study. During last 5 years, we treated 5 cases of penile strangulation. Three were treated on emergency basis. Two patients, who had chronic constrictive injury due to prolonged use of condom catheter, were managed electively. Complete history was taken and physical examination was done. One case, which had strangulation due to string, constricting agent was divided. Two patients who had strangulation with wheel bearing, shaft of penis distal to metallic ring was compressed by tape and

bearing was slid over after lubrication (Fig.1-3). Two patients had auto amputation of glans due to prolonged use of condom catheter (Fig.4). Their stumps were revised and internal catheter was passed.

Figure-1
Strangulating object (Wheel Bearing) applied at base of penis. Large necrotic wound seen at penile shaft



Figure-2
Distal compression of penile shaft for removal of strangulating object



Figure-3
Base of penis showing deep necrotic wound after removal of wheel bearing



Figure-4
Auto-amputation of glans after prolonged use of condom catheter for incontinence



RESULTS

The age of the patients was 17 to 58 years. Duration of strangulation was 24 hours to 6 months. In one patient, who had strangulation due to string, constricting agent was divided and recovery was uneventful. Two cases having strangulation due to wheel bearing, one needed debridement of the shaft and later on skin grafting of penile shaft, results were

satisfactory. Other case, whose penile shaft was debrided, was planned for grafting but he left against medical advice. Two patients, who had amputation of glans showed satisfactory outcome after revision of stumps. Patients profile, management and outcome of the management is summarized in Table.1

Table 1:
Patients profile, management and outcome.

S. No	Age (yrs)	Material Used for Strangulation	Reasons for using Strangulating Agents	Duration	Management	Results	Remarks
1	17	Fine String	For Fun	24 Hrs	Division of String	Uneventful	
2	55	Wheel Bearing	To Prolong Erection	2 Days	Bearing removed after distal compression of penis + Skin grafting	Satisfactory	
3	52	Wheel Bearing	To prolong erection	6 Days	Bearing removed after distal compression of penis.	Absconded	Patient was candidate for skin grafting
4	58	Condom Catheter	To prevent wetting of cloths	4 Months	Stump of amputated glans revised by using local skin	Satisfactory	Patient already had amputation of glans
5	35	Condom Catheter	To prevent wetting of cloths	6 Months	Stump revised by using local skin	Satisfactory	Patient already had amputation of glans

DISCUSSION

Strangulation injuries of penis are rare but serious injuries. Strangulating objects can be metallic or non-metallic and used for fun, erotic purposes or to prolong erection^{1, 2}. Occasionally psychotic patients having self destructive behavior apply constrictive agents on penis³. Brunt of injury is more severe in thin non-metallic objects but removal is easy as compared to thick metallic objects which are difficult to remove but extent of injury is less severe⁴. In paediatric patients, the common cause of strangulation is hair tourniquet syndrome where penis is wrapped by human hair especially in circumcised children⁵. Other causes in child population may be child abuse and wrapping the penis with thread to prevent enuresis^{6,7}. Urgent urological intervention is needed for decompression of penis distal to constriction by removal of strangulating agent. In our case series, two patients who had applied wheel bearings on their penis; it was not possible to cut the hard thick steel of bearing so distal penis was compressed and bearing was slid over compressed penile shaft and removed⁸. Spectrum of injury varies from mild edema of penis to frank gangrene depending upon the duration of injury, type of strangulating agent and associated infection^{2, 3, 4, 8}. In our series, two patients presented with amputation of glans and total transection of urethra, which had chronic strangulation injury by tightly applied condom catheter. Further management after removal of constrictive agent depends upon situation. Debridement of gangrenous, infected skin requires skin grafts and urethral fistula require reconstructive urethral surgery^{3, 9}. In our series of 5 cases, one patient had uneventful recovery, two patients which had injury due to metallic wheel bearing, one of them needed skin grafts at proximal shaft of penis and other absconded. One who absconded after removal of bearing had extensive debridement and was a candidate for skin grafting. Two cases who had amputation of glans, stumps were revised by local skin with satisfactory results.

CONCLUSION

Penile strangulation injuries are very serious and lead to even loss of organ. These should be recognized early and prompt removal of

strangulation agent is necessary to prevent serious complications.

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