

# Plication without degloving – Safe and effective approach for correcting lateral and dorsal penile curvature: Case series

Hüseyin Cihan Demirel, Cumhuriyet Yeşildal<sup>1</sup>, Musab Ilgi<sup>1</sup>, Ahmet Tefvik Albayrak<sup>1</sup>, Emre Aykanlı<sup>1</sup>, Sinan Levent Kireççi<sup>1</sup>

Department of Urology, University of Texas MD Anderson Cancer Center, Houston, Texas, USA, <sup>1</sup>Department of Urology, Şişli Hamidiye Etfal Training and Research Hospital, University of Health Science, Istanbul, Turkey

## Abstract

Penile curvature deformities are often manageable with surgical reconstruction methods. We aimed to show the safety and efficacy of ventral and dorsal plication techniques without degloving in our two patients who have penile curvature. Two young adults, aged 20 and 23 years, presented to our clinic with lateral and dorsal penile curvatures. This problem has been sustaining since their teenage. Following the required preparations, two surgical techniques were used, namely Nesbit and Lue's "16-dot" technique. Patients completed a satisfaction survey at a mean of 6 months later the surgery. Although both patients reported a subjective decrease in penile length, their satisfaction rate was high. Penile plication without degloving is a safe and effective technique for correcting dorsal and lateral penile curvatures.

**Keywords:** Degloving, Nesbit procedure, penile curvature, plication

**Address for correspondence:** Dr. Musab Ilgi, Department of Urology, Şişli Hamidiye Etfal Training and Research Hospital, University of Health Science, Istanbul, Turkey.

E-mail: ilgimusab@gmail.com

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## INTRODUCTION

Surgical reconstruction by grafting or plication techniques is the most common treatment modality for penile curvatures. First, wedge resection technique was introduced by Nesbit,<sup>[1]</sup> then 16-dot technique was introduced by Lue.<sup>[2]</sup> These techniques are applied with degloving. Although this is the most common approach, there are always unlucky complication risks such as damages to neurovascular structures.

In this article, we aimed to show the safety and efficacy of ventral and dorsal plication techniques without degloving, in patients with penile curvature.

## CASE REPORT


Our two cases that are 20- and 23-year-old young adults presented to our clinic with persistent lateral and dorsal penile curvatures. They had neither trauma, nor any other medical history. This problem has been sustaining since their teenage times.

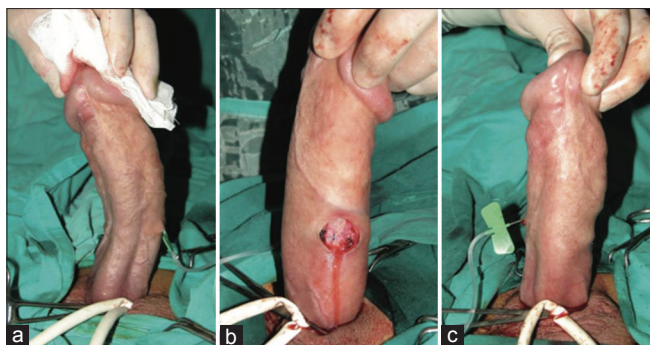
For the first patient, Nesbit procedure was performed through a 2-cm longitudinal incision from the proximal to midpenile shaft on the aspect opposite to the deviation.

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**Figure 1:** (a) The photo demonstrates that preoperative lateral curvature image. (b) Perioperative image explicates that the Nesbit procedure was performed through a 2-cm longitudinal incision from the proximal to the mid penile shaft on the aspect opposite to the deviation on the middle. (c) The image is the following the surgery corrected penile shaft, from 60° to 10° with Nesbit procedure

Then, for every 10° of deformation, we started to excise a trapezoid of 1-mm wide. In the end, we closed the tunica albuginea with nonabsorbable sutures to straighten the penile shaft [Figure 1].

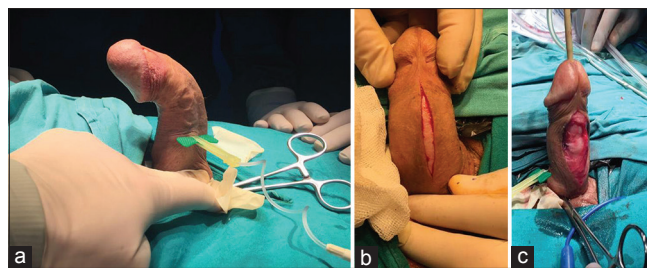
For the second patient, Lue's "16-dot" technique was performed with the same incision as the first patient, again without degloving. Following the dissection of tunica albuginea, Senn retractors were used to reveal the neurovascular anatomy. Plication sutures were placed in parallel and opposite to the angle of the greatest curvature. The stretched penile length was measured, and intraoperative photographs were taken after plication. Patients were discharged home on postoperative day 1 [Figure 2].

One of the patient's curvatures was corrected from 90° to 0° using 16-dot technique. The lateral curvature in the other patient was corrected from 60° to 10° using Nesbit procedure [Figure 1]. Patients' satisfaction survey was completed in the 6<sup>th</sup> postoperative month.

Although both patients reported a decrease in penile length, their rates of satisfaction for penile curvature, penile rigidity, and erectile function were high.

## DISCUSSION

There are numerous surgical techniques for the treatment of penile curvature disorders.<sup>[3,4]</sup> The most common among them are Nesbit and Lue's "16-dot" techniques. However, independent of which technique used, a degloving procedure is always an option. The surgeon should consider the demographic features of the patient and the severity of the deformity, to decide on the appropriate technique. As we know that the degloving procedure can harm the neurovascular bundles, it should be avoided if it is not a real in need.



**Figure 2:** (a) The photo demonstrates that preoperative dorsal curvature image. (b) Perioperative image shows that the Lue's "16-dot" technique was performed through a 4-cm longitudinal incision from the proximal to the mid penile shaft on the aspect opposite to the deviation on the middle. (c) The image is following the surgery corrected penile shaft with plication suture

We performed two different techniques for our patients. Nesbit procedure was used for the first patient and Lue's "16-dot" procedure was applied for the second patient. For both of them, degloving was not applied. The results were satisfactory, and no perioperative and postoperative complications were seen. Patients' satisfaction survey was completed in the 6<sup>th</sup> postoperative month. Their sexual and urinary functions were healthy, and the satisfaction rates were high. Although both patients reported penile length decrease, it was not more than expected.

Plication without degloving is a safe and feasible surgical procedure for penile curvature.

## Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Nil.

## Conflicts of interest

There are no conflicts of interest.

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