# **Original Research Paper**



## A NOVEL TECHNIQUE OF REDUCTION CLITOROPLASTY

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The purpose of this paper is: To introduce a novel surgical technique of reduction clitoroplasty. **ABSTRACT** In this study, ten patients, known cases of congenital adrenal hyperplasia with clitoromegaly were operated for reduction clitoroplasty. In our technique, the phallus was degloved till the base and plicating sutures were taken from the base of crura to the shaft of the clitoris to the subcoronal mucosa. It was observed that this technique had good cosmetic results and patient satisfaction.

## **KEYWORDS**: clitoroplasty, congenital adrenal hyperplasiaes.

### **INTRODUCTION:**

Clitoroplasty is one of the most important components for genital reconstruction in the patients of congenital adrenal hyperplasia. While performing clitoroplasty every effort is made not only to provide excellent cosmesis but also to retain normal clitoral innervation for optimal sexual gratification. Several techniques have been described in the literature, right from total clitoridectomy to the recession of the enlarged clitoris.

Various drawbacks of these techniques are:

- 1. Blood loss
- 2. Long operative time
- 3. Unsatisfactory cosmesis
- 4. Damage to the pudendal nerves
- 5. Need for revision clitoroplasty.

To avoid these disadvantages, a modified technique with good cosmesis, while still preserving the dorsal neurovascular bundle has been described in this paper.

Duration of the study: 2016-2018.

Objective: To describe a novel technique of reduction clitoplasty.

### **MATERIAL AND METHODOLOGY:**

- Ten patients, known cases of androgen insensitivity syndrome with clitoromegaly were selected for this technique.
- A written informed consent was taken. The operation was performed under general anaesthesia. Patient placed in lithotomy position and foley's catheterization was done.
- Circumcoronal incision was taken over the ventral aspect of the phallus and was extended laterally. [Fig.1]



[Fig.1]

The redundant skin between the two incisions was excised [Fig.



[Fig. 2]

Degloving of the phallus was done till the base. [Fig. 3 & 4]



[Fig.3]

[Fig. 4]

Plicating sutures were taken from the base of the crura to the shaft of the clitoris and to the subcoronal mucosa using Prolene 3-0 and tightened. [Fig. 5]



[Fig. 5]

Skin to skin suturing was done circumferentially using monocryl 4-0. [Fig. 6]



[Fig. 6]

#### Post-operative care:

- Removal of foley's catheter and check dressing was done on post-operative day 5 and IV antibiotic coverage was given for 3 days post-operatively.
- There was no evidence of any peri-operative complications.

#### **Observations and Results:**

Patients were followed up regularly post-operatively on an outpatient basis. The mean age of the patients was 5.63 ± 3.82 years (range- 1 to 16 years). The mean follow-up was done for 15.94 ± 5.46 months (range- 6 to 24 months). The mean duration of the operation for 10 patients was 58.8 minutes. The mean blood loss was 12.5 ml. No surgical site infection was noted in any of the patients. No patient required revision reduction clitoroplasty surgery. Good cosmetic results and patient satisfaction was achieved. [fig. 7 showing before the appearance of the phallus before the surgery and fig. 8 showing after the appearance after the same]



fig.7



fig.8

## **DISCUSSION:**

Clitoroplasty is defined as: Reducing the size of the clitoris or the penis In the past, the clitoral hypertrophy was treated by clitoredectomy (excision of the clitoris) [1,2]. However, the clitoris, carries sensations necessary for sexual pleasure and mutilating it would cause deprivation of the same for the patient. Hence, clitoridectomy as a treatment for clitoromegaly was long abandoned and the various techniques to correct it while still retaining the viability and sensation of the clitoris have been described in the literature.

The first Clitoroplasty was described by Lattimer in 1961 [3]. The principle of this technique is to dissect the corpora cavernosa and to trim down the size of the glans until the tip is of the expected size and then the erectile shaft is buried under the skin.

However, this technique does not correct the malformation but it hides the malformation and it is a cause for painful erection [4].

Kumar et al published an article which described a technique which consisted of a partial resection of the corpora cavernosa, after releasing the neurovascular pedicle of the gland, which was then

followed by the restoration of the continuity, by suturing the edges using non-absorbable silk sutures. Even though this technique had gained popularity as a neurovascular bundle preserving technique it did not yield good cosmetic results and gave an disproportionately large appearance of the phallus during an erection.[5]

Kogan and associates reported, subtunical excision of the erectile tissue by incising it laterally, through the Buck's fascia to resect the erectile corpus cavernosa, in order to maintain an intact blood supply to the glans and an alternative safe method of diminishing the size of the shaft and the glans.[6]

The key points of this new technique are:

- 1. Less operative time
- 2. Minimal blood loss
- 3. Preservation of the neurovascular bundle
- 4. Good cosmesis.

#### **CONCLUSIONS:**

This novel technique of the neurovascular bundle sparing reduction clitoroplasty seems to be a reliable and a safer method with excellent cosmesis and satisfactory results. It is also simpler, more physiological, has lesser complications and corresponds perfectly in achieving the necessary result.

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