

Simple Design for Nipple Reduction of Male Patient

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Background:

Nipple hypertrophy in male is rare, and the cause of hypertrophy remains unknown. The hypertrophy of nipple causes aesthetic and social problem. Several methods of nipple reduction were proposed in the past. Some methods reduced height only. Others, while capable of reducing both height and diameter, were complicated.

Aim and Objectives:

There is no definition of male nipple size. We suggest the adequate size of male nipple is 5mm in diameter and 2mm in height. We report a simple design for nipple reduction of male patient. The procedure is safe and easy to perform.

Materials and Methods:

Between January 2009 and January 2012, we performed nipple reduction with our design on 5 male patients (8 nipples, 3 bilateral and 2 unilateral). A simple design consisted with a central column and three dermal flaps was used.

Results:

The pre-operative nipple diameter ranged from 8mm to 11mm. Height ranged from 6mm to 8mm. Post-operative nipple diameter averages 5mm and height averages 2mm. No complications such as necrosis, infection, numbness of nipple occurred.

Conclusion:

We provide a simple design for male patient to reduce nipple hypertrophy in both height and width simultaneously without complications. (J Taiwan Soc of Plast Surg 2014;23:337~342)

Key words: Male nipple, Nipple hypertrophy, Reduction nippleplasty

Introduction

Nipple hypertrophy is a frequently encountered problem in Asian women, but is rare in men. There were some case reports that nipple hypertrophy correlate with gynecomastia. The definite cause of nipple hypertrophy remains unknown. The hypertrophy of nipple causes aesthetic and social problem. Besides,

the irritation of nipple when wearing clothes may occur.

Several methods of nipple reduction were proposed in the past for both sexes. Some methods reduced height only. Others, while capable of reducing both height and diameter, were complicated. There were few methods described before for male patient. We report our new design of reduction nippleplasty for

male patient. It is simple and easy to perform.

Materials and Methods

Between January 2009 and January 2012, we performed reduction nippleplasty with our design on male patients. They received unilateral or bilateral nipple reduction. A simple design consisted with a central column and three dermal flaps was used. Total 5 male patients underwent surgery. Three of them had bilateral nipple hypertrophy, and the others had unilateral nipple hypertrophy. All procedures were performed under local anesthesia. (1% lidocaine with 1:200,000 dilution of epinephrine)

Operative Procedures

1. A circle with the nipple at its center and with the desired diameter (d) of the new nipple is drawn. The diameter of the new nipple is set at 5 mm.
2. The desired height (h) of new nipple is measured. A circumferential dotted line is drawn at the height of h level. The height of new nipple is set at 2mm. (Fig. 1A)
3. Three rectangles with a width of d are drawn with dotted lines on the wall of nipple centered at 2, 6, and 10 o'clock. (Fig. 1B)
4. Points a1, a2 and a3 are marked at 4, 8 and 12 o'clock at the base of the nipple. The lines are drawn from a1, a2 and a3 to form these three rectangles.
5. Circumferential excision of 2mm in depth is made. The central column is preserved. Three arrow areas are also excised, and three dermal flaps are left. (Fig. 1C)
6. After undermining the three dermal flaps, 6-0 Nylon is used for one layer, three points suture between the central column and three dermal flaps. (Fig. 1D)
7. The new nipple diameter is set at 5mm, height is set at 2mm. Stitches are removed 10-14 days postoperatively.

Results

Between January 2009 and January 2012, total 5 male patients (8 nipples, 3 bilateral and 2 unilateral) received reduction nippleplasty by our method. The pre-operative nipple diameter ranged from 8mm to 11mm, nipple height ranged from 6mm to 8mm. Post-operative nipple diameter averages 5mm and height averages 2mm. The follow-up period ranged from 6 months to 2 years. No complications such as necrosis, infection, numbness of nipple occurred. All patients were satisfied with the result. (Figs. 2, 3)

Discussion

The male nipple-areola-complex is a rudimentary organ and without physiologic function. It possesses similar hormone sensitivity and sexual sensitivity as the female organ¹. The nipple sensation is supplied from the anterior branch of the lateral cutaneous branch of T4 which forms an extensive plexus within the nipple, its sensory fibers terminate close to the epithelium as free endings².

There are various methods published before for nipple reduction. However, most of them only discussed about female patient. Ren et al³. classified nipple reduction methods into two groups. One method involved destruction of the lactiferous duct, while the other method did not. In male patient, lactiferous duct is a rudiment, so we only concern about the issue of sensory loss.

Marshall et al⁴. raised four small quadrant flaps at the nipple-areolar junction and did a core excision of the hypertrophic nipple for male gynecomastia. DeBono and Rao⁵ used sinusoidal wave method with two peaks and two troughs, then did partial nipple excision for male nipple hypertrophy. These previous methods destroyed the central column of nipple, and in return caused numbness to nipple.

Ferreira et al⁶. described a method which three equidistant ellipses were excised in vertical direction and two circles in horizontal direction. This method preserved central column and could decrease both nipple height and diameter, but the method was

complicated and had the risk of skin necrosis.

Our method is based on the geometric theory that the circumference of a circle is approximately three times its diameter. These three dermal flaps' widths could just match the central column circumference. The new nipple is still cylindrical in shape. Because we

preserve central column of nipple, there is no patient complaint regarding numbness of nipple after surgery.

This design is modified and simplified by our published nipple reduction method for female⁷. This new design is easy to perform and will result in minimal scarring.

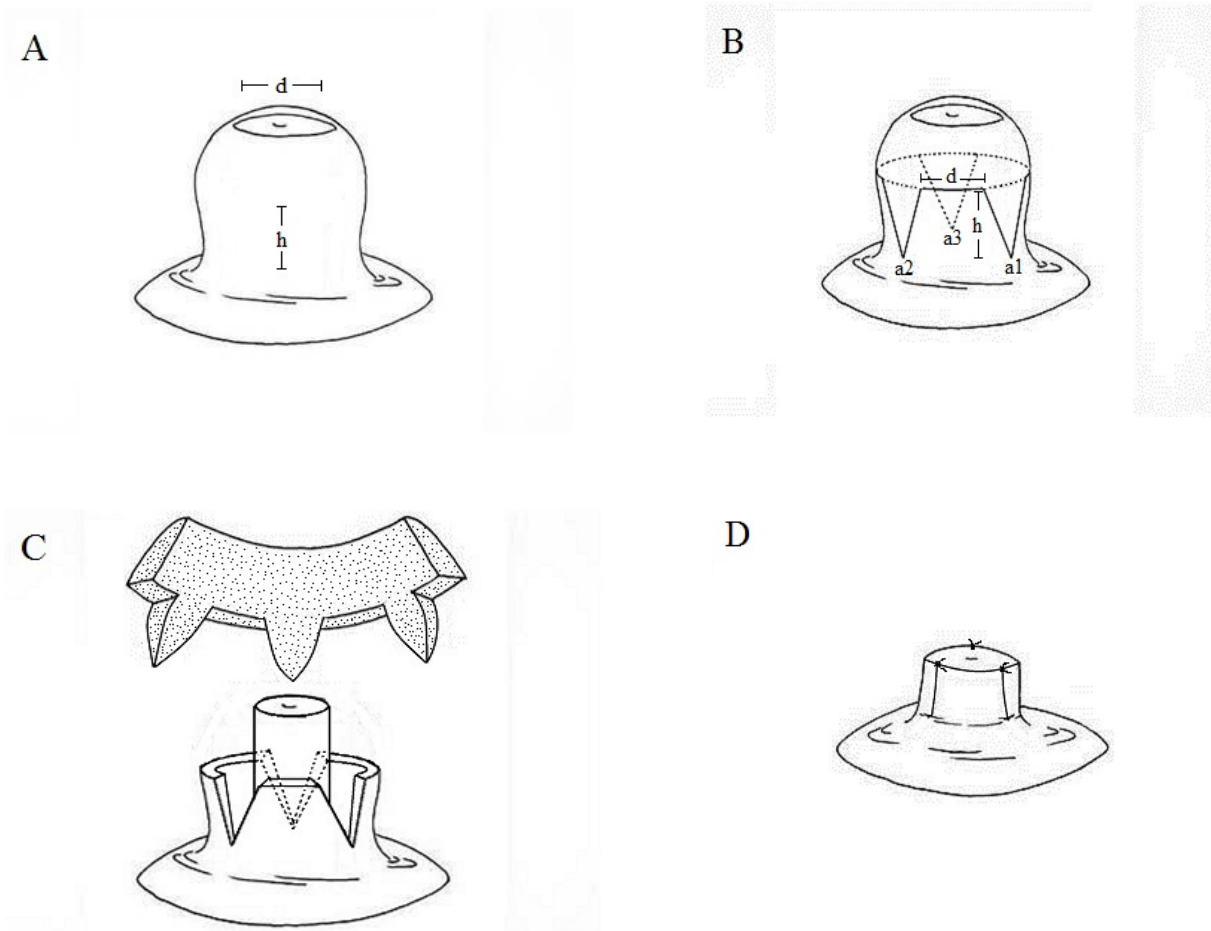


Fig. 1. Schematic diagrams illustrated the operative procedures. (A) Estimate diameter and height of new nipple (view at 6 o'clock). (B) Three rectangles with a width of d are drawn with dotted lines at 2, 6, and 10 o'clock. Three points a_1 , a_2 , a_3 marked on nipple base at 4, 8 and 12 o'clock. (C) Circumference excision of nipple is performed with three dermal flaps and central column preserved. (D) Final result. Three points suture between central column and three dermal flaps.

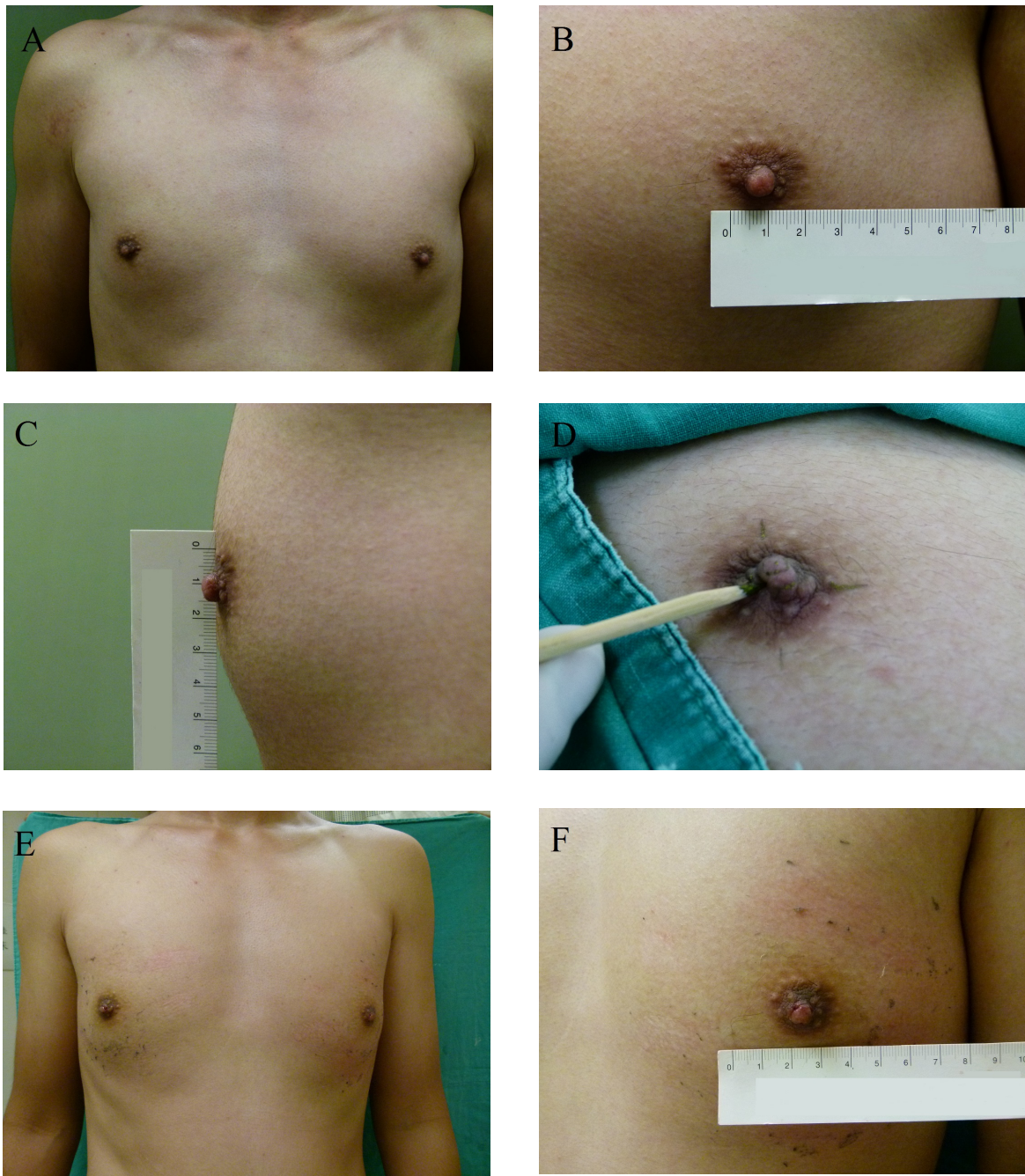


Fig. 2. (A) A male patient with bilateral nipple hypertrophy. (B) Preoperative measurement. Nipple diameter: 8mm. (C) Nipple height: 8mm. (D) Operative design. (E) Postoperative 2 weeks, no hematoma or skin necrosis occurred. (F) Postoperative measurement. Nipple diameter: 5mm.

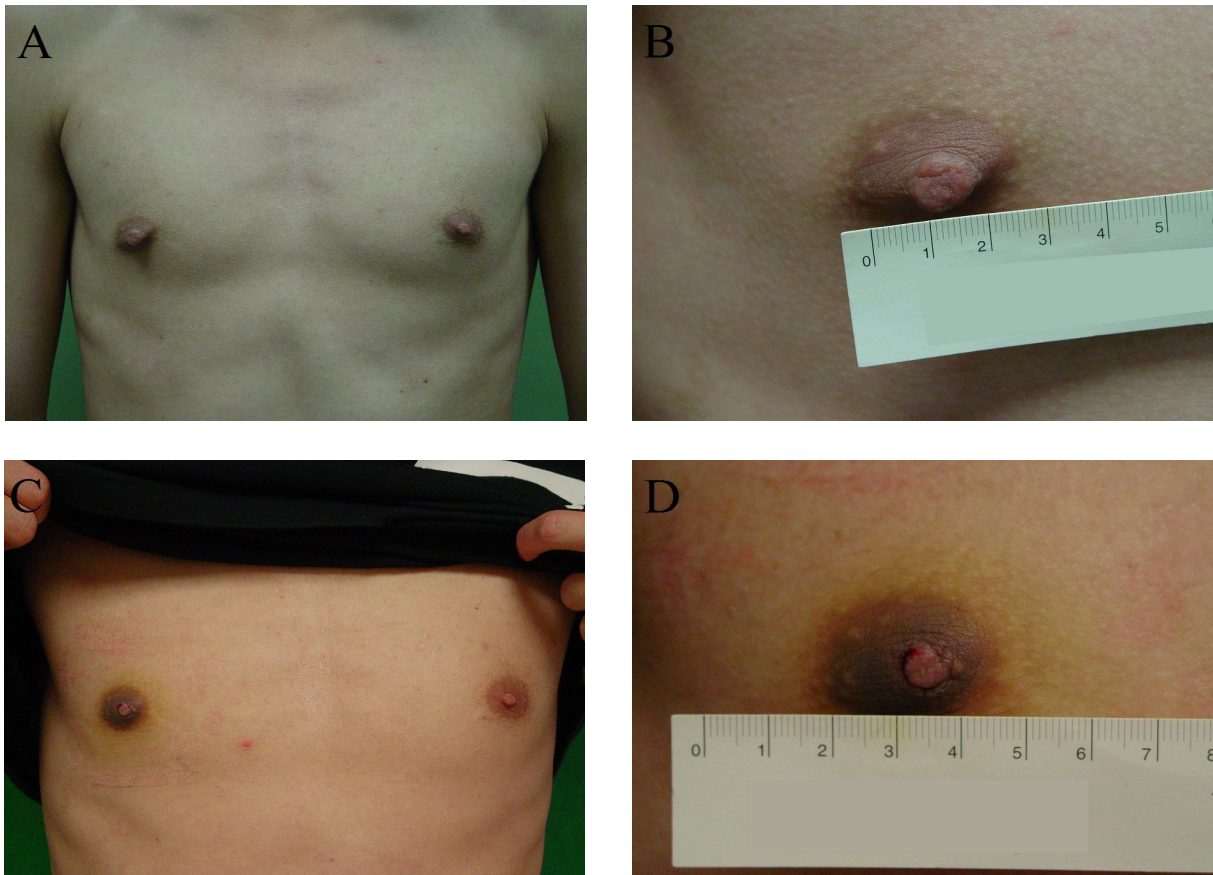


Fig. 3. (A) A male patient with right side nipple hypertrophy. (B) Preoperative measurement. Nipple diameter: 11mm. (C) Postoperative 2 weeks. (D) Postoperative 2 weeks. Nipple diameter: 5mm.

Conclusion

We provide a simple design for nipple reduction of male patient. The method can reduce nipple height and diameter simultaneously without complications. This method can be applied to any type of male nipple hypertrophy with good results.

Reference

1. Krause W. Diseases of the male nipple and areola. *J Dtsch Dermatol Ges.* 2011 Dec;9(12):1004-9. doi: 10.1111/j.1610-0387.2011.07720.x. Epub 2011 Jun 9.
2. Susan S. Gray's Anatomy, CHAPIER 54, Chest wall and breast. 2009:930-937.
3. Ren M, Wang Y, Wang B. Nipple reduction using a three-dimensional Z-shaped incision technique. *J Plast Reconstr Aesthet Surg.* 2013 Jun; 66(6):770-5.
4. Marshall KA, Wolfort FG, Cochran TC. Surgical correction of nipple hypertrophy in male gynecomastia: case report. *Plast Reconstr Surg* 1977 Aug; 60(2):277-9.
5. DeBono R, Rao GS. A simple technique for correction of male nipple hypertrophy: the sinusoidal nipple reduction. *Plast Reconstr Surg* 1997 Dec; 100(7):1890-2.
6. Ferreira LM, Neto MS, Okamoto RH et al. Surgical correction of nipple hypertrophy. *Plast Reconstr Surg* 1995 Apr; 95(4):753-4.
7. Huang WC, Yu CM, Chang YY. Geometric incision design for reduction nippleplasty. *Aesthet Plast Surg* 2012 Jun; 36(3):560-5.

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男性乳頭縮小之手術設計

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背景：

男性乳頭肥大的病例相當稀少，且發生的原因不明。乳頭肥大會影響病人的美觀及造成社交的問題。過去有些許文獻探討乳頭縮小手術，有些方式無法同時減少乳頭高度及直徑，有些手術太複雜。

目的及目標：

男性的乳頭大小並沒有明確的定義。我們認為合適的大小是直徑 5 公厘，高度 2 公厘。我們想設計一個手術方式能夠有效且安全的縮小男性乳頭。

材料及方法：

在西元 2009 年 1 月至 2012 年 1 月之間，五個男性病人（3 個雙側乳頭肥大，2 個單側乳頭肥大，總共 8 個乳頭）接受手術。我們使用的手術方式保留了乳頭中柱，並以切除三個方位的皮瓣來達到縮小乳頭的目的。

結果：

術前病患乳頭直徑是介於 8 公厘到 11 公厘，乳頭高度是介於 6 公厘到 8 公厘之間。術後平均乳頭直徑是 5 公厘、高度 2 公厘。沒有皮膚壞死，傷口感染，或乳頭感覺麻痺等併發症發生。

結論：

我們提供一個簡單有效的手術方式來治療男性乳頭肥大。這個方式可以同時減少乳頭的直徑及高度，而且沒有併發症的產生。