

Gynaecomastia by Laser Liposuction

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Abstract

The term Gynaecomastia now is used for a group of disorders that denotes enlarged breast rather than its original Greek meaning 'women like breast due to glandular enlargement' in men. The group includes Pseudogynaecomastia aka Lipomastia and Adipomastia. The article discusses the very basics of gynaecomastia and causative factors. While referring to the pull out technique of conventional liposuction, the author discusses the refined technique of gland excision avoiding periareolar incision and general anaesthesia by Laser Liposuction. There is reference to the Priming technique that the Author developed and uses as a standard prior to Laser Liposuction. The technique developed over a period of 7 years is elaborated in detail. The technique has several advantages over conventional methods and can be employed in true gynaecomastia or Adipomastia with equal advantages, results and patient satisfaction. Freedom from side effects and high safety profile are pointers to the author's preference to the technique.

Keywords: *Pseudogynaecomastia; Gynaecomastia; Laser Liposuction; Priming*



Figure 1

Introduction

Gynaecomastia tops the list of cosmetic procedures among men attending a Cosmetic surgery clinic. Though originally the term referred to the increase in size of the breast in men (breast look alike of women due to glandular enlargement), in common parlance it is used broadly to include Adipomastia aka Pseudogynaecomastia or Lipomastia. The difference is in what the enlargement is made of, whether gland or fat. The term Gynaecomastia is used here in its broader perspective to include glandular, fatty glandular or fatty.

Gynaecomastia, an innocuous condition, by itself does not warrant medical intervention. 40% of young adults and more than 60% of elderly are reported to be in various grades of this condition. The typical young adult with gynaecomastia is embarrassed to expose his body, hesitant to remove his dress in places like swimming pools for the fear of being made fun of. His bodily preoccupation leads to the constant look out for anything that is said to or claimed to bring a relief. To them the assurance that "Gynaecomastia is an extended physiological process that failed to wane at the appropriate time" does not work. This physiological event happens thrice in a male's life time, first as a baby, second time during adolescence and third time during late adulthood in 60s'.

Gynaecomastia is the result of hormonal imbalance, excess of oestrogen in some form or lowered testosterone. Maternal oestrogen during infancy and declining testosterone causing oestrogen dominance in late adulthood are causative factors during those phases of life. True gynaecomastia seen during early adulthood, initiated during adolescence, is caused by several extraneous factors such as drugs, alcohol, steroids, cosmetics, food and lifestyle. The oestrogen imbalance in turn leads to the development of breast tissue. No family history was recorded. Idiopathic gynaecomastia [4] (82%) is the condition where no known cause is made out. True gynaecomastia may be spoken of as glandular (fibroglandular) or mixed based on its composition as made out by Ultrasound scans [11,12,14].

More than 50% of patients reporting with enlarged female like breasts grouped under this condition really are 'pseudogynaecomastiacs' (Adipomastia or Lipomastia). Their condition is part of their generalised obesity. The enlargement is simply fatty that is grossly redundant with little or normal gland. Occasionally unilateral gynaecomastia [4] (24%) is seen which turns out to be a true gynaecomastia. In those with bilateral enlargement, the enlargement may or may not be symmetrical with a difference in size.



Figure 2

Gynaecomastia treatment is same whether 'true or psuedo'. A large number of empirical measures tried have been reported to be of dubious value and are not proven. Hormonal therapy results are inconsistent and inconclusive.

Surgery is definitive and corrects the deformity with certainty. The surgical techniques were [4,13,15-17]:

- Subcutaneous mastectomy using Webster method with periareolar incision
- Pitanguy technique with transareolar incision if skin redundancy was absent
- Davidson concentric circles technique if skin reduction was necessary.
- Liposuction assisted (Power PAL or Ultrasonic assisted UAL) Mastectomy with excision is widely practiced as a standard procedure. Longheu reported 6% recurrence in his study. Development of hematoma (4%) and hypertrophic scar (2%) were reported. 78% underwent General Anaesthesia and 22% were operated under Local anaesthesia. 74% were satisfied with the result and 26% unsatisfied due to asymmetry, scar etc. The different techniques have their advantages and disadvantages inherent in any surgical procedure and it is the surgeon's expertise with the technique that finally counts in the expected results.

The author in a series of study over 7 years has combined and refined the 'pull through [15-17]' technique with liposuction. It was widely believed that liposuction will not be effective for correcting glandular gynaecomastia. The technique to remove gland thro' liposuction is described here that scores over conventional method on several fronts.

Method

Laser liposuction

The technique 'laser Liposuction [1,2] with extrication' is performed as a walk in procedure under Tumescant Anaesthesia [1,3]. The breast tissue is 'Primed a day before. Priming [5] is sensitising the tissues. The priming lyses the fat intervening the breast lobule breaking up the structure of the gland. The targeted tissues, fat and gland included, soften and shrink.

A 3 mm incision is made in the mid axillary line midway between the areola and axilla under TA. The patient is fully awake and not given any sedation. Laser liposuction using 1470 nm laser is performed in a standardised protocol. The cannula and laser freely passes thro' the gland already broken up by Priming [1]. The gland is now in shambles. The broken up gland is extricated (a modified pull through of pieces with instrument as against the conventional method) thro' the same incision. Laser skin tightening [2] is done before closure. No infection or scarring were reported. Hematoma was reported in 2 patients. 3 patients reported unsatisfied.

Result and Discussion

Advantages

Peri areolar incision is avoided. Catheter or surgical drains were not needed. In the series of study over 7 years, no incidence of seroma or infections were reported which are self-explanatory on the basis of the methods employed: laser releasing heat keeps away the infection and epinephrine in the tumescent anaesthetic preventing the seroma, haemorrhage and hematoma issues. Laser skin tightening [1,2] does away with the need for skin excision even in cases of massive enlargement. The technique avoids general anaesthesia which is a great advantage. The patient resumes normal activity from next day.

Disadvantages

The longer surgery duration time may not be feasible for busy surgeons and busy hospital OT schedules. Yet the patient wins over in his own terms, around whom everyone in the industry runs around.

Conclusion

The Author concludes that "Laser Liposuction with Priming and extrication" is an effective method to correct True Gynaecomastia/ Adipomastia, in all Grades of the condition, under Tumescant Anaesthesia [1,3] as a walk in procedure. The technique is safe and no side effects have been reported in the study.



Figure 3

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