Original Article

A single centre experience of Gynecomastia Treatment : a review of 1184 cases

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Abstract

Gynecomastia is the most common breast condition in males and is defined clinically as generalized benign enlargement of male breast tissue. Because gynecomastia causes anxiety, psychosocial discomfort and a fear of breast cancer, patients seek medical attention and require diagnostic evaluation. Most often idiopathic, it requires a complete etiological assessment to rule out an organic cause. The surgical technique depends on the degree of the gynecomastia and the distribution and proportion of the different breast components. The purpose of this study is to report our experience in its pattern of presentation & surgical management.

Keywords

1. Gynecomastia
2. Surgery
3. Liposuction
4. Male breast

Introduction

Gynecomastia is the most common breast condition in males and is defined clinically as generalized benign enlargement of male breast tissue.1-4 Because gynecomastia causes anxiety, psychosocial discomfort, and a fear of breast cancer, patients seek medical attention and require diagnostic evaluation. Another related condition manifesting as fat deposition without glandular proliferation and occurs most frequently in obese men is known as pesudogynecomastia.[3]

In mild cases, simple reassurance coupled with advice on diet and exercise may be sufficient.5 However, in more severe cases, medical and/or surgical intervention is required.[5]

Often, it is observed to start in adolescent boys. The major cause of gynecomastia is thought to be an imbalance between androgen & estrogen effects due to an absolute increase in estrogen production, relative decrease in androgen production, or a combination of both.2,4 Most often idiopathic, it requires a complete etiological assessment to rule out an organic cause. The purpose of this study is to report our experience in its pattern of presentation & surgical management.

Material and methods

This is a descriptive retrospective study conducted between May 2016 to May 2022 with a minimum post-operative follow-up of 6 months. The information collected included: the number of patients, age, Simon's stage, laterality, the surgical technique used, the existence of complications, and the aesthetic results. All the cases have been operated by a single senior Plastic Surgeon.

Methods used were 1. Gland excision alone, 2. Liposuction + Gland excision, 3. Liposuction + Gland excision + excess skin excision, 4. Stage 1- Liposuction + Gland excision and Stage 2- Skin excision after 6 months.

Some surgeries involving Grade 1 Gynecomastia had been done under local anesthesia. The majority cases had been under General anesthesia.

A hormonal study was conducted in patients with less secondary sexual characteristics and patients with abnormal findings were referred to Endocrinologist for medical management.

Results

A total of 582 cases of gynecomastia have been operated. Taking into account the bilateral nature of the condition, there were a total of 1164 gynecomastia cases.

The average age was found to be 22.6 years with 546 cases (47%) out of 1164 cases from 20-30 year age group.

Gynecomastia was bilateral in 88% (512) cases. Left side predominated in unilateral forms (46 out of 70 cases). Stage IIa of Simon was the most common, found in 62% (722) out of 1164 gynecomastias, and is comparable with different Indian studies [6,7,8].

Secondary sexual characters were normal in 97% of cases. The gonadal examination was normal in the majority of patients (95%), and 67% were overweight or obese.

Co-morbidities like diabetes, hypertension, hypothyroidism, depression, and epilepsy were observed in 5% of cases.

Psychological discomfort was present in all patients. The pain was noted in 7% of cases. Social withdrawal & academic setbacks were also observed.

Almost all patients had a history of treatment by medicines, homeopathy, and ayurvedic methods.

71.7% of cases were operated by liposuction & gland excision and 26% of cases were operated by gland excision alone.

The overall complication rate was 19.5%. Seroma was the most common complication (11%) followed by hematoma (5%).

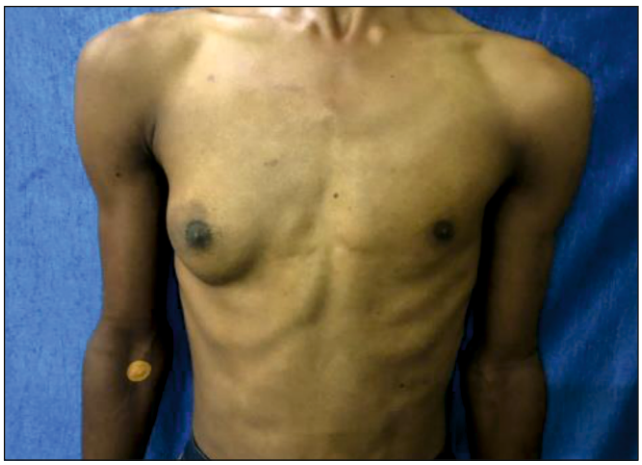


Fig. 1 Right-sided Grade 2 Gynecomastia

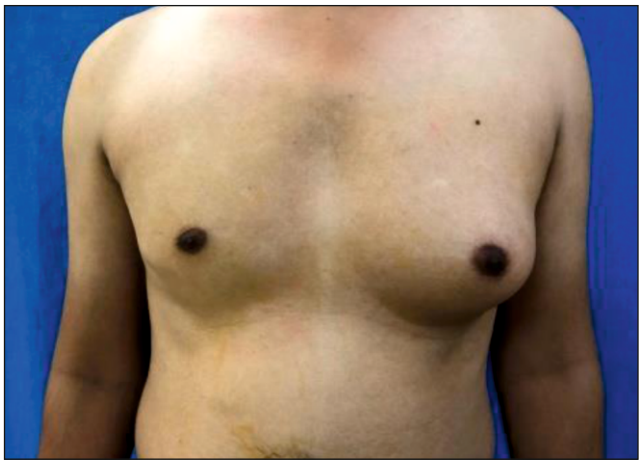


Fig 2 Left-sided Grade 2 Gynecomastia

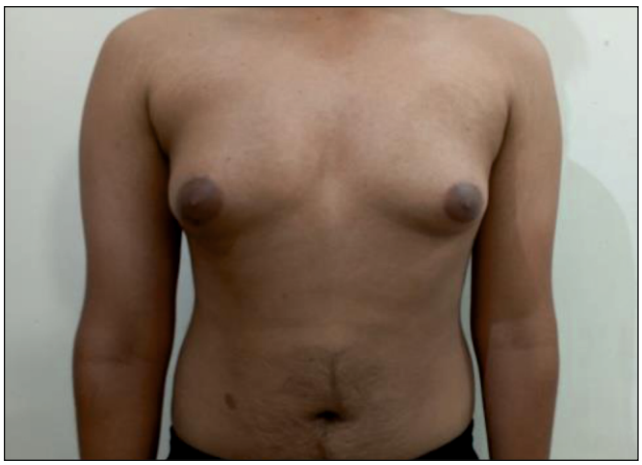


Fig 3 Bilateral Grade 2 Gynecomastia

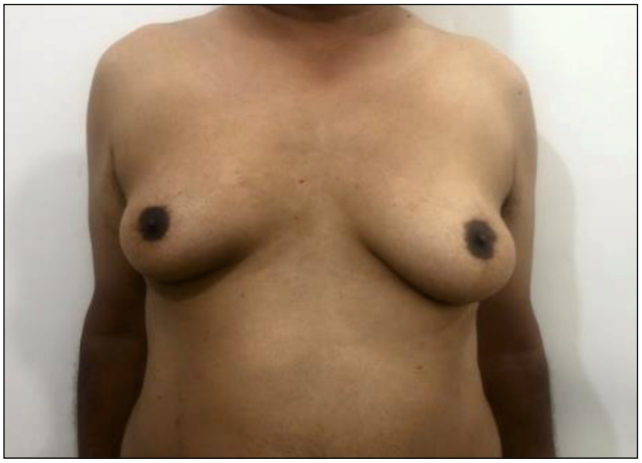
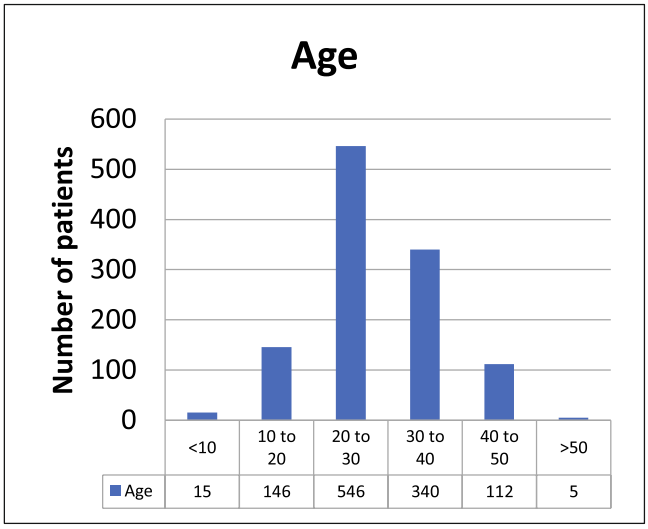


Fig 4 Right side Grade 2 & Left side Grade 3 Gynecomastia



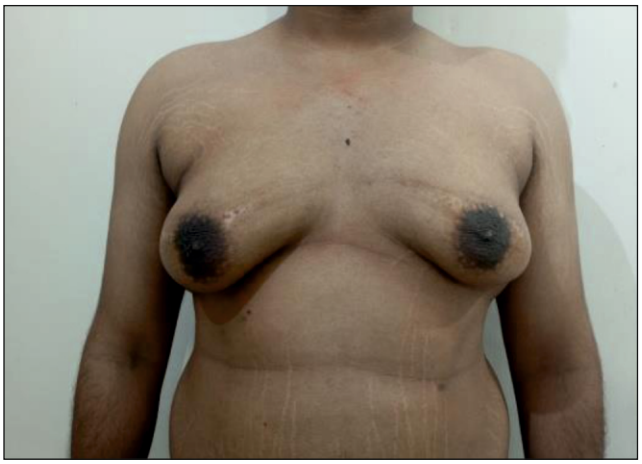
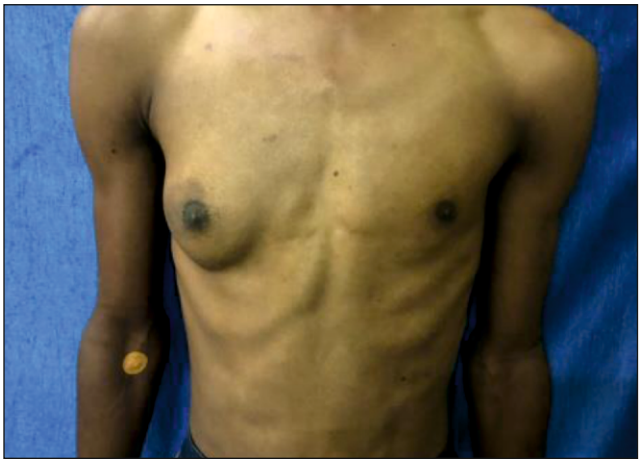


Fig 5 Bilateral Grade 4 Gynecomastia

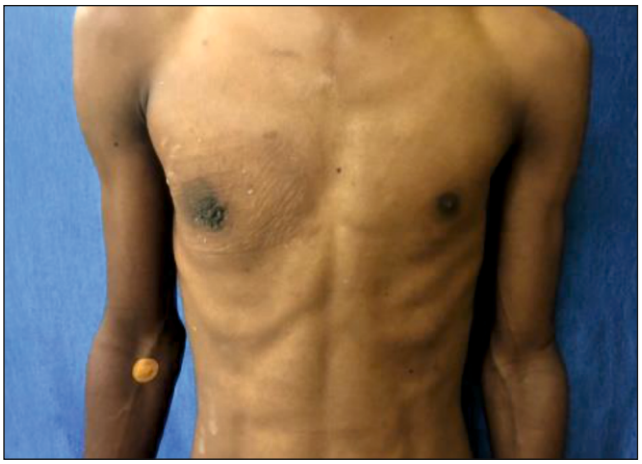
Simon Grade	Percentage
Grade 1	25%
Grade 2	62%
Grade 3	12%
Grade 4	1%

METHOD	Number of cases	Percentage
Gland excision	302	26%
Liposuction alone	Nil	Nil
Liposuction+Gland excision	835	71.7%
Liposuction+Gland excision + Excess skin excision	12	1%
Stage 1-Liposuction + Gland excision Stage 2- Skin excision	15	1.3%
TOTAL	1164	100%

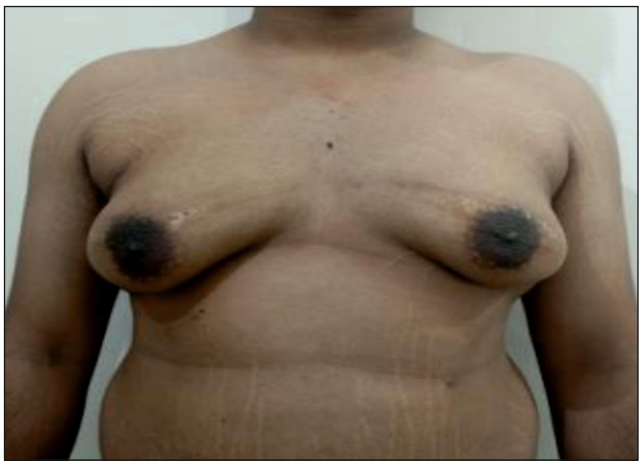
Complications	Percentage
Hematoma	5%
Seroma	11%
Partial areola necrosis	0.5%
NAC necrosis	0.5%
Suppuration	0.5%
Residual gynecomastia	2%
TOTAL	19.5%



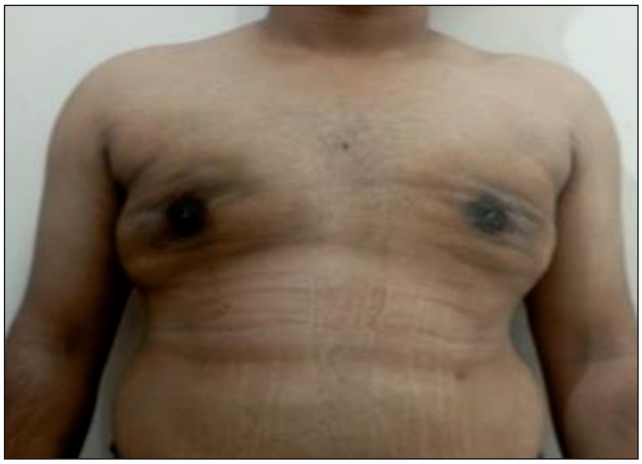
Pre-op



Post-op Day 2



Pre-op



Post-op

Discussion

The number of gynecomastia patients attending plastic surgery clinics is on the rise in our institution. The incidence of gynecomastia is increasing in various other parts of the world as well.[6]

Gynecomastia is a very common finding in our population. All cases should be properly investigated to rule out known causes. Surgery is done to achieve a normal appearance of the masculine thorax with the smallest possible scar.[7-9]

Gynecomastia has been reported to start in adolescent males. The average age found in this study was 22.6 years with extremes of 8 and 52 years. 5 patients were more than 50 years of age. This is by different Indian studies.[10-12]

Gynecomastia has often been reported to be bilateral with left side predominance. Stage II of Simon is the most common. This study results have also come up with similar comparable findings with different Indian studies. [10-12]

In this study, 67% were overweight or obese. However, in a south Indian study, most of the patients had BMI less than 25 (61.6%).[13] In another study, Costanzo et al found out that 62.7% of the patients were overweight or obese.[14]

The surgical technique depends on the degree of the gynecomastia and the distribution and proportion of the different breast components (fat, parenchyma, and looseness of the skin envelope). Conventional liposuction combined with open excision was first described as a treatment for gynecomastia by Teimourian15,16 and Perlman in 1983 and has become a widely accepted method.11 In this study also, the majority (71.7%) of the cases were operated by liposuction & gland excision.

Overall complication rates in gynecomastia surgery in different studies are 20-25 % 7 and are comparable with this study. Seroma and hematoma can be drained easily by syringe aspiration.

Conclusion

Most of the patients seeking surgical management of gynecomastia in our study had idiopathic gynecomastia. The most commonly used surgical technique is subcutaneous mastectomy, which involves direct resection of the glandular tissue using a peri-areolar approach, with or without liposuction. More extensive surgery, including skin resection, is required for patients with marked gynecomastia and those who develop excessive sagging of the breast tissue (with weight loss). Surgical complications are common in gynecomastia but are easily manageable.

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