

Gynecomastia

A GUIDE FOR FAMILIES



Boston Children's Hospital
Plastic and Oral Surgery

Table of Contents

Our ProgramPage 2

Meet Our TeamPage 3

Overview of Gynecomastia.....Page 4

Conservative Management (Non-surgical solutions).....Page 5

Psychological Support/Surgical Management.....Page 6

Surgical Technique.....Page 7

Potential Risks and Complications.....Page 9

Preparing For Surgery.....Page 10

Day of Surgery.....Page 10

Post-Operative Recovery.....Page 11

Our Program

The Adolescent Breast Center at Boston Children's Hospital is the first program in the nation dedicated exclusively to evaluating and treating breast conditions in children, teens and young adults. Our center uses a broad, research-driven approach focused on restoring self-confidence and improving quality of life.

Adolescent Breast Center - Meet Our Team

Physicians



Brian I. Labow, MD
Director, Adolescent Breast Clinic;
Attending Physician, Department
of Plastic & Oral Surgery, Associate
Professor of Surgery, Harvard Medical
School



Oren Ganor, MD
Co-Director, Center for Gender
Surgery; Attending Physician,
Department of Plastic and Oral
Surgery, Assistant Professor, Harvard
Medical School



Carolyn R. Rogers-Vinzena, MD
Attending Physician, Department
of Plastic & Oral Surgery, Assistant
Professor, Harvard Medical School



Ingrid Ganske, MD
Attending Physician, Department
of Plastic & Oral Surgery, Assistant
Professor, Harvard Medical School



Arin K. Greene, MD, MMS
Vascular Anomalies and Pediatric
Plastic Surgery Chair; Director
Lymphedema Program; Laboratory
Director, Professor, Harvard Medical
School

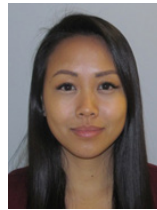
Physician Assistants



Lauren Koup, PA-C



Emily Hurst, PA-C



Anna Mak, MPH, PA-C



Haley Chrisos, PA-C



Dani Young, PA-C

Overview of Gynecomastia

Overview of the condition

Gynecomastia refers to a condition where there is above average amounts of breast tissue in a male. Usually, it's just a result of elevated estrogen levels during puberty. This kind of gynecomastia almost always just goes away with time. In rare cases, it can have other causes such as prescription drugs (such as marijuana, and certain psychiatric medications), over-the-counter-medications, illegal drugs (such as steroids), or tumors.

Symptoms

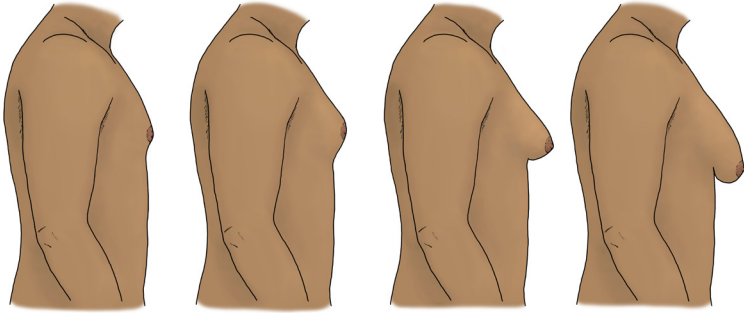
- Gynecomastia is not physically harmful, although it can occasionally indicate more serious underlying conditions. Occasionally, boys with gynecomastia experience tenderness that can be treated with medications.

It's more common to experience psychological and social issues rather than physical problems. Patients with gynecomastia often hide their chests in public or withdraw socially and avoid discussing their concerns with parents and peers.

How Common Is Gynecomastia:

It's not unusual or abnormal in adolescent boys. Temporary breast enlargement often happens during adolescence when there are hormonal changes.

- About half of all males between 12 and 16 who are going through puberty experience some form of gynecomastia in one or both breasts.
- It's usually a temporary condition, and it is quite abnormal for the breasts to stay developed, eventually flattening out completely in a few months to a few years.
- Since it usually goes away on its own, typically no medical treatment or surgery is needed.
- There are differing severities of gynecomastia



Consultation Appointment

During your consultation appointment you will meet with a physician assistant as well as your surgeon. We gather information regarding your health history and family history. We also gather information regarding how gynecomastia affects your life including both physical and mental or social symptoms. We will discuss conservative management options and surgical options if appropriate. If you are seriously considering surgery, we will take photographs and measurements at the consultation appointment to submit to insurance. Insurance companies require these photographs to determine whether or not they will cover the procedure. We never include a patient's face in these photographs; they are kept confidential and not used for any other purpose.

Conservative Management (Non-surgical solutions)

Surgery isn't the only treatment option for breast conditions. We work closely with the Division of Adolescent Medicine to investigate the underlying causes of breast-related problems. If hormonal problems are suspected, our doctors can refer patients to some of the nation's leading experts, right here at Boston Children's Hospital. Occasionally, additional evaluation is needed in order to investigate hormonal imbalances or any issues tied to weight or eating habits.

However, in most cases, no treatment is needed for gynecomastia. In 90 percent of teenage boys, gynecomastia goes away in less than three years.

Some boys find that wearing loose-fitting clothing makes the condition appear less noticeable until the extra tissue goes away over time. A doctor should still monitor the condition every few months.

For the remaining 10 percent of males who continue to have gynecomastia, treating the underlying cause may improve the condition. Some treatment possibilities which could be carried out in certain cases under the guidance of a physician include possibly ending or switching medications or losing weight.

Psychological support

Gynecomastia can affect more than just physical health. We understand that living with a breast disorder can cause body-image problems and low self-esteem in teens. Research specifically indicates that gynecomastia patients have significantly worse psychosocial wellbeing than unaffected boys their age. They have worse social functioning, mental health, and self-esteem, regardless of severity of gynecomastia (Nuzzi et al., 2013).

However, research also has found that in patients who are surgical candidates, surgery greatly improves their psychosocial wellbeing, so that their quality of life is equal to their unaffected peers (Nuzzi et al., 2018).

If you or your child is already seeing a therapist or other mental health professional, our team can partner with that person to evaluate treatment options and coordinate follow-up care. Some breast conditions, gynecomastia in particular, are sometimes associated with obesity and disordered eating. Adolescents who are obese or struggling with disordered eating can also take advantage of programs right here at Boston Children's, such as the Optimal Weight for Life program, that help manage those problems.

Surgical Management- Gynecomastia Repair

- In some patients, gynecomastia can be successfully treated with surgery. Our experts conduct a thorough evaluation and advise patients on the surgical options that may be appropriate for their condition, age and physical maturity.
- We often consider surgery when no further regression of tissue can be expected based on age and development and when excessively large or abnormal breast growth is interfering with quality of life or causing pain.

Most procedures can be handled on an outpatient basis. We carefully evaluate each patient on a number of factors to make sure they're an appropriate candidate for surgery.

Appropriate Timing

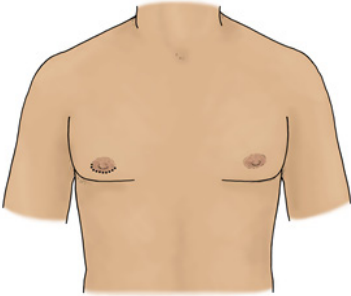
- It is important that pubertal/hormonal related breast development is completed before surgery.
- In patients considering losing weight, it is important that this is done prior to surgery. After weight loss, the breasts often become more ptotic (saggy) and therefore there is more excess skin. For the best overall aesthetic outcome, it is important that our patients are at their ideal weight prior to surgery.

Surgical Technique

- Depending on which surgical option is right for you, treatment is performed either in the office with local anesthesia (numbing medication) or in the operating room under general anesthesia. Your surgical team will let you know which option would be appropriate for your specific case.
- **Liposuction**
 - In some cases, when the excess tissue is adipose (fatty) tissue, liposuction may be an appropriate treatment. Liposuction requires insertion of a cannula, a thin hollow tube, through several small incisions. Other times, liposuction is done in combination with a direct tissue excision.



Shaded area represents area where tissue will be removed from the incision at the lower border of the areola.



In this picture, the dotted line represents the scar pattern following the procedure.

- **Direct tissue excision**

- Excision techniques are recommended where glandular breast tissue or excess skin must be removed to correct gynecomastia. Excision also is necessary if the areola will be reduced or the nipple will be repositioned to a more natural male contour. Incision patterns vary depending on the specific conditions and surgical preference.

- **Peri-areolar incision**

- An incision is made along the lower portion of the perimeter of the areola. Through this incision, any glandular and fatty tissue may be directly removed. Because this method does not allow for removal of excess skin, it can often take some time for the elasticity of the skin to tighten back down to the chest. On occasion, when excess skin remains, a secondary surgery would be performed which would help to remove this excess skin. This is usually performed about 6 months to one year later.

- **Double Incision and Free Nipple Grafting**

- After the incision is made, excess glandular and fatty tissue as well as skin is removed to achieve a male appearing chest contour.
- Free nipple grafting is a technique that involves the nipple being completely removed and then replaced as a skin graft. The nipple is also made smaller if appropriate before being grafted into its new position on the chest. Although the nipple will be preserved, there will be complete loss of sensation.

Potential Risks and Complications

- **Scar Formation**

- The incision lines that remain are visible and permanent scars, although usually well concealed beneath a swimsuit or bra.
- We will guide you on appropriate scar care and management in order to help facilitate the most esthetic scars possible.
- Everyone scars differently, and poor scarring, hypertrophic (thickened) or keloid scars are possible.
- It takes a full year for a scar to mature, meaning that it will slowly improve in appearance throughout that time, typically becoming less pink, less raised and less firm.

- **Seroma**

- A seroma is a collection of fluid that builds up under the skin. Seromas may develop after drain removal. Occasionally these need to be drained by an very quick in office procedure.
- In the event of numbness, sensation often returns slowly over the course of a year.
- Numbness is permanent in patients who have undergone free nipple grafting.

- **Asymmetry**

- Every person has some natural level of asymmetry of the chest before surgery. While we aim to achieve the highest level of symmetry possible during gynecomastia repair, it is common to have some subtle asymmetries remaining.

Preparing for Surgery

- **Pre-surgical Appointment**

- After your surgery is approved and scheduled, you will have a pre-surgical appointment. During your presurgical appointment, your physician assistant and surgeon will review the surgical plan with you and answer any questions you may have.

- **Medications**

- Avoid taking aspirin, anti-inflammatory drugs (NSAIDS such as Motrin, Naproxen and herbal supplements as they can increase bleeding) for 10 days prior to surgery.

- **Stop smoking well in advance of breast reduction surgery. Smoking can cause wound healing issues, compromise blood supply to the nipple areola complex and complicate your recovery.**

Day of Surgery

- **Anesthesia**

- You will meet with your anesthesia team prior to surgery. Please let them know if you have had any history of nausea or vomiting after previous general anesthesia or become car sick. This will help them to preventatively treat any nausea/vomiting you may have. They will start an IV for you after using a numbing spray and can give you medication through this IV that will help you to relax.

- **Surgical Marking**

- You will change into a gown and be in a private area before surgery. Your surgeon will use a surgical marker to draw the surgical plan on your chest. While some of these surgical markings are areas where incisions will be, others are measurements and landmarks that are used to help give you the best esthetic and symmetrical result possible.

- **Surgical Timing**

- Surgical time varies depending on the procedure being performed and the severity of the gynecomastia. As soon as you are comfortable in the PACU (post anesthesia care unit) we will bring your family in to accompany you.

Post-operative Recovery

- After surgery, you'll have some padded gauze and a surgical vest in place. Under the gauze and surgical vest, you will have Steri-strips (white adhesive bandages) that cover the incision lines.
- Commonly, placement of surgical drains is needed. These are small plastic tubes which help to drain any excess fluid from the breast. These are often removed one week following surgery at your first follow up appointment.
- You'll need to take about one week off from work or school.
- Don't do any activity that is intense or strenuous. Don't lift anything more than 10 pounds or swim for at least four to six weeks. You can get excuse notes from the surgeon's office at your follow-up appointment.
- Check with your surgeon before starting to exercise.
- You can go back to driving 24 hours after you stop taking prescription pain medication.

Post-Operative Course (After Surgery)

- Day 0: If your surgery was performed in the operating room, you will wake up in a surgical vest with gauze pads and drains in place. As soon as you are awake enough for visitors, we will bring your family in to be with you. You will be monitored in the post anesthesia care unit (PACU) until you are meeting the criteria to go home.
- Day 1: If you spent the night at the hospital after surgery, today you will be discharged after a physical examination and review of post-operative instructions. If you had drains placed, we will show you how to take care of these at home. At home, please take Tylenol and Motrin as instructed to manage discomfort.
- Days 2-7: You will be wearing the surgical vest in this time, including while

sleeping. Most patients take this time off from school or work as they sometimes take some prescription pain medication as well. You can return to school and light duty work 24 hours after you stop taking prescription pain medication.

- Week 1 Follow Up Appointment: Please bring compression shirts with you to this appointment. Compression is an important part of healing. If drains were placed, they will likely be removed at this visit.
- Weeks 2-4: You continue to wear a compression shirt or surgical vest and follow activity restrictions. While your steri-strips (white adhesive bandages) will remain on, it is okay to shower and get them wet, patting them dry after and replacing the vest/shirt.
- Week 4 Follow Up Appointment: If the steri-strips have not come off on their own, we will plan to remove them in the office. Sometimes there can be areas along the incision lines that are slower to heal than others, or a suture that can be felt coming through the skin. These are easily and painlessly managed at this appointment and we review how to best care for your scars. Your surgeon or Physician Assistant will also let you know whether or not you may resume normal activities such as strenuous activity, swimming and lifting over ten pounds.
- 3 Month Follow Up Appointment: All surgical swelling is resolved by this appointment.

- **Insurance Information**

Understanding your insurance coverage and benefits can be challenging as each situation, treatment plan and insurance policy is so widely variable. Our team is here to help you navigate through this process.

- Insurance companies often consider this to be a cosmetic procedure which means it may not be a covered benefit. This sometimes will depend on the severity of the gynecomastia. We will work with you to help you understand your insurance policy.

• **References**

Adolescent Breast Center, (2020). Boston Children’s Hospital. Retrieved from: http://www.childrenshospital.org/centers-and-services/programs/a-_-e/adolescent-breast-center-program

Nuzzi, L., Cerrato, F. E., Erikson, R. C., Webb, C. R., Rosen, H., Walsh, E. M., DiVasta, A. D., Greene, A. K., and Labow, B. I., (2013). Psychosocial impact of adolescent gynecomastia: A prospective case-control study. *PRS Journal*. 2013; 131:4, p 890-896

Nuzzi, L., Firriolo, J.M., Pike, C. M., Cerrato, F. E., DiVasta, A. D., and Labow, B. I., (2018). The effect of surgical treatment for gynecomastia on quality of life in adolescents. *Journal of Adolescent Health*. 2018; 63: p 759-765

Notes:

Boston Children's Hospital Department of Plastic and Oral Surgery



Boston Children's Hospital
Plastic and Oral Surgery