GYNECOMASTIA PHILOSOPHY

I enjoy treating patients with gynecomastia because the results are reliable, immediate and extremely gratifying for patients afflicted with this problem. I have seen many patients literally "come out of their shells" with a new confidence being able to be around others with their shirt off whether it be at the pool, the beach or even playing basketball. I also enjoy performing this procedure because I think we have perfected the technique. In virtually all but the worst cases we are able to perform the operation with only a simple small incision under the arms and thereby avoid any scar around the nipple areola or use of drainage tubes. We do roughly 75 operations per year for this problem, which allows us a high level of consistency and excellence. Last of all, we finish the procedure with a technique that allows the patient to wake up pain free and comfortable.

The Psychological Burden of Idiopathic Adolescent Gynecomastia

Christopher Kinsella, Jr., M.D.
Angela Landfair, M.D.
S. Alex Rottgers, M.D.
James J. Cray, Ph.D.
Carla Weidman, Ph.D.
Frederic W.-B. Deleyiannis, M.D.
Lorelei Grunwaldt, M.D.
Joseph E. Losee, M.D.

Pittsburgh, Pa.

Background: For a population of adolescents, gynecomastia is a persistent problem. Occurring during a critical period in the formation of self-image and gender identity, this gender-incongruent process may disrupt normal psychological development. This study was designed to identify the prevalence of psychological disturbances in young male patients presenting with symptomatic gynecomastia to determine whether psychological examination should be included as a routine portion of this patient population's treatment.

Methods: From 2002 to 2009, patients aged between 10 and 18 presenting to our institution for idiopathic adolescent gynecomastia were recruited to participate in a retrospective cohort study. All patients underwent psychological interviews conducted by the same clinical psychologist (C.W.) and were examined using the following metrics: the Children's Depression Inventory, the Multidimensional Anxiety Scale for Children, and the Child Behavior Checklist. All patient scores were compared against population norms.

Results: Twenty-four patients between the ages of 12 and 18 were observed. Compared with the general population, measures of anxiety, depression, and social phobia were significantly elevated in patients with gynecomastia; 100 percent of patients with gynecomastia received a *Diagnostic and Statistical Manual of Mental Disorders–IV* diagnosis.

Conclusions: Idiopathic adolescent gynecomastia is a psychological threat to normal self-esteem and sexual identity. Patients presenting with this condition likely suffer an adjustment disorder subsequent to this anatomic stressor. Surgeons should strongly consider referring their patients with gynecomastia for psychological evaluation and treatment as an adjunct to successful surgical management of this condition. Future studies examining the postoperative effects on psychological health both with and without psychological treatment will be of great interest to treating physicians. (*Plast. Reconstr. Surg.* 129: 1, 2012.)

CLINICAL QUESTION/LEVEL OF EVIDENCE: Risk, IV.

Gynecomastia, defined as glandular enlargement of the male breast, is common in the adolescent period, with a reported incidence between 32 and 64 percent for boys between the ages of 10 and 16.[1] The classification and therapeutic options for gynecomastia have received a great deal of attention in the literature, whereas the psychological and social impacts of gynecomastia have yet to be fully described. Though usually transient, with only 7.7 percent of patients having persistent gynecomastia beyond their teenage years,[1] this condition occurs at a psychologically sensitive and critical period in the development of identity.[2,3] At this age, children are solidifying their body image, self-esteem, and sexual identity. The severity of breast development also affects psychological development, as gynecomastia can vary from small subareolar glandular budding (grade I) to large pendulous breasts (grade IV).[4] As gynecomastia represents a gender-incongruent development during this critical period, it is important to identify any psychological disturbance occurring in tandem with the patient's physical presentation to the physician.

These psychological disturbances are important to understand, as they may represent an additional

From the Division of Plastic Surgery, Children's Hospital of Pittsburgh of the University of Pittsburgh Medical Center.
Received for publication April 28, 2011; accepted July 21, 2011.

DOI: 10.1097/PRS.0b013e3182361efd

Disclosure: *The authors have no financial interest to declare in relation to the content of this article.*

Discussion: The Psychological Burden of Idiopathic Adolescent Gynecomasatia

David B. Sarwer, Ph.D.
Jacqueline C. Spitzer, M.S.
Canice E. Crerand, Ph.D.
Philadelphia, Pa.

The physical changes associated with adolescence have the potential to dramatically influence an individual's psychosocial development. The normal physical changes seen with puberty can threaten the body image development and self-esteem of the individual. Although these occurrences were once seen as a somewhat innocuous "rite of passage" for most individuals, research over the past several decades has shown that teenagers can develop a negative body image that can echo throughout adulthood.[1] This is most commonly seen in the development of weight and shape concerns and potentially eating disorders in female adolescents. In the plastic surgery literature, the impact of physical appearance on psychosocial development has been most frequently discussed in the context of cleft lip and palate patients, as well as in children and adolescents who undergo craniofacial procedures.[2]

The study by Kinsella and colleagues highlights the psychosocial challenges in a previously understudied group of patients—adolescent boys with idiopathic gynecomastia.[3] The 24 adolescents studied were assessed by a clinical interview (performed by a psychologist), as well as conceptually relevant and psychometrically validated paper-and-pencil measures of symptoms of anxiety and depression, as well as daily behavior. All 24 patients received a formal psychiatric diagnosis (primarily adjustment disorders) and displayed greater symptoms of anxiety, depression, and social phobia compared with the general population. These results, and the authors' thoughtful interpretation of them, underscore the significant degree of psychosocial distress experienced by boys with idiopathic gynecomastia.

At the risk of minimizing these important results, the study is curtailed by some methodological limitations. Given the paucity of research on this patient population, a retrospective study such as this is informative. Future studies in this area, however, should be prospective in nature. The use of reliable and valid psychometric assessments is a strength. Unfortunately, the reliance on comparisons with the norms of these measures, rather than a contemporaneously assessed comparison group, is another methodological limitation that can be improved on in subsequent studies. A particularly relevant construct that was not assessed was body image. Body image disturbances likely contribute to the psychosocial problems reported by adolescents with gynecomastia and should be investigated in future studies. Studies also should explore the social impact of gynecomastia, given that affected adolescents often report significant problems with teasing and stigmatization. Finally, as the authors indicate, the psychological issues seen in breast reduction and mastectomy patients are well-documented in adult women. It is important for future studies to investigate the psychosocial changes experienced by adolescent girls with breast conditions, including macromastia, as well as other, less common, breast anomalies that can affect psychosocial functioning.

Even with these limitations, this well-written article underscores the emotional suffering experienced by these adolescents. Unfortunately, it appears that third-party payers are still slow to acknowledge that the psychosocial impact of a visible difference in physical appearance, such as gynecomastia, can profoundly affect the psychosocial functioning of the individual. There has been

From the Departments of Psychiatry and Surgery, The Edwin and Fannie Gray Hall Center for Human Appearance, Perelman School of Medicine at the University of Pennsylvania; and Division of Plastic Surgery, Children's Hospital of Philadelphia.
Received for publication August 26, 2011; accepted August 26, 2011.

DOI: 10.1097/PRS.0b013e3182361f14

Disclosure: *The authors have no financial interest to declare in relation to the content of this Discussion or of the associated article.*

progress in this area with insurance companies for some conditions, such as craniofacial procedures and breast reconstruction. The past decade also has witnessed a greater recognition of the relationship between physical appearance and psychosocial functioning (namely its importance to self-esteem and quality of life) at both the National Institutes of Health and the U.S. Food and Drug Administration. It is hoped that studies such as this will help further educate insurance companies and other agencies about the importance of an individual's physical appearance to daily functioning.

The article also describes the collaboration between the treating plastic surgeon and the consulting mental health professional. As we have written elsewhere,[4–6] plastic surgeons, like all medical professionals, should conduct a mental health screening on all new patients. Although some emotional distress related to the appearance concerns is to be expected (as seen in the present study), excessive distress and/or profound disruption in the patient's daily functioning suggests the potential presence of a number of psychiatric diagnoses. We agree with the conclusion of Kinsella and colleagues that such symptoms should be more extensively evaluated by a mental health professional before surgery. This evaluation may lead to the recommendation that mental health treatment occur simultaneously with surgical treatment, with the belief being that the combined treatment approach may lead to the best possible psychosocial outcome.

David B. Sarwer, Ph.D.
The Edwin and Fannie Gray Hall Center for Human Appearance
10 Penn Tower
3400 Spruce Street
Philadelphia, Pa. 19104
dsarwer@mail.med.upenn.edu

REFERENCES

1. Smolak L, Thompson JK, eds. *Body Image, Eating Disorders, and Obesity in Youth: Assessment, Prevention, and Treatment.* 2nd ed. Washington, DC: American Psychological Association; 2009.
2. Sarwer DB, Infield AL, Crerand CE. Plastic surgery for children and adolescents. In: Smolak L, Thompson JK, eds. *Body Image, Eating Disorders, and Obesity in Youth: Assessment, Prevention, and Treatment.* 2nd ed. Washington, DC: American Psychological Association; 2009:341–366.
3. Kinsella CR, Landfair A, Rottgers SA. The psychological burden of idiopathic adolescent gynecomatia. *Plast Reconstr Surg.* 2011;129:1–7.
4. Crerand CE, Franklin ME, Sarwer DB. Patient safety and body dysmorphic disorder in cosmetic surgery patients. *Plast Reconstr Surg.* 2008;122:1–15.
5. Sarwer DB. The psychological aspects of cosmetic breast augmentation. *Plast Reconstr Surg.* 2007;120(Suppl. 1):110S–117S.
6. Sarwer DB, Pruzinsky T, Cash TF, Goldwyn RM, Persing JA, Whitaker LA, eds. *The Psychology of Reconstructive and Cosmetic Plastic Surgery: Clinical, Empirical, and Ethical Perspectives.* Baltimore, Md: Lippincott Williams & Wilkins; 2006.