



Looks To Die For: Dr. 911

by Philip A. Belcastro, Ph.D.

In a typical “reality” television episode featuring Elective Cosmetic Surgery (ECS) a young woman, dissatisfied with small size breasts, is filmed selecting her new breast size with her surgeon. The episode concludes with the delighted patient unveiling her newly installed breasts to girlfriends at a pool party. “Reality” television programs are immensely popular and have a significant pseudo-educational impact on Americans. Viewers who regularly watch ECS “reality” shows: (1) are more likely to undergo ECS; (2) believe these television shows accurately portray the totality of ECS practices; and (3) believe they are knowledgeable about ECS (Crockett et al., 2007; McGrath & Schooler, 2004). The danger here is that these viewers may fall victim to the known risks of ECS for example: **there is a higher-than-expected suicide rate among women with breast implants**; physicians perform cosmetic procedures with as little training as a weekend seminar or after watching a thirty-minute video; and the mortality

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Are Circumcised Males Less Likely To Contract HIV?

by Danna Ethan, MA, MSW

Significant research findings from three clinical trials reported that male circumcision (removal of the foreskin covering the glans, or tip of the penis) significantly reduces the risk of HIV transmission in African men. The studies carried out in Uganda, South Africa and Kenya randomly assigned men to either the intervention group (receiving circumcision) or to the control group (receiving a delayed circumcision) (Auvert et al., 2005; Bailey et al., 2007; Gray et al., 2007). All three clinical trials were halted early when it was clear that the

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Prescribing Medicines Based On Skin Color

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(death) rate for *lipoplasty* (e.g. “tummy-tucks”) in America is higher than the mortality rate for motor vehicle accidents or homicides. Given the risks associated with the more than 11 million cosmetic procedures performed in America each year...one should not rely on *Dr. 90210* for a second opinion.

Breast Augmentation & Suicide

For some time there has been concern of a correlation, that is a link between suicide and ECS breast implants. McLaughlin et al. (2004) report that there is a 200% to 300% increase in suicide for women with cosmetic breast implants when compared to women in the general population. Lipworth et al. (2007) followed 3527 Swedish women ten years after their cosmetic breast implant surgery. These researchers concluded that there was an excess of deaths from suicides, drug and alcohol abuse/dependence and other related causes. Rohrich et al. (2007) argue that studies finding a correlation between suicide and breast implants are often flawed because their samples (number of women they studied) were too small to accurately reflect the actual suicide rate from breast implants. These researchers further argue that the demographics and lifestyle of women seeking breast implants lend themselves to a higher risk of suicide. Indeed women seeking breast

implants are more likely to: have had a higher number of lifetime sexual partners; use birth-control hormones; be younger at their first pregnancy; have a history of abortions; frequently consume alcohol and tobacco; have a higher divorce rate; and be below average body weight (suggesting the presence of an eating disorder) (Sarwer et al., 2007). Noting these criticisms ***one of the most comprehensive research reviews to date, examining six major studies since 1992 concluded that the suicide rate of women receiving breast implants was indeed twice that expected in the general population*** (Sarwer et al., 2007).

Another aspect of breast augmentation is breast reduction. While research does not point to a risk of suicide associated with breast reduction, there is some evidence that breast reduction does not result in an enduring improvement of the woman's quality of life, mental health, self-esteem or body image (Cook et al., 2006).

ECS patients are often repeat customers, sometimes not by choice. It is not uncommon for the first breast augmentation to be followed by a second or multiple surgeries resulting from the patient's dissatisfaction; failure of the implant; maturation (pre-teens and teens maturing into their adult bodies); aging; pregnancy; or change of mind for a different cosmetic look.

All of these investigators, regardless of their point of view as to the link of breast implants to suicide, recommend pre-surgery screening of patients for psychiatric illness, as well as long-term post surgery monitoring

of cosmetic breast surgery patients. All of these investigators recommend further study to determine which prospective breast augmentation patients are at greater risk of psychiatric illness or self-harm.

Body Dysmorphic Disorder

Another related concern in ECS practices is the relatively frequent occurrence of the patient with *Body Dysmorphic Disorder* (Jakubietz et al., 2007). *Body Dysmorphic Disorder* is a psychiatric disease characterized by a person's preoccupation with a minimal or nonexistent appearance defect which causes significant distress and interferes with the person's social life. The perceived physical defect may involve the profile of the whole body or may be focused on a part of the body such as the breasts. Crerand et al. (2006) report that seven to fifteen percent of ECS patients may suffer from Body Dysmorphic Disorder.

Lipoplasty

Lipoplasty is a major surgical procedure to remove excess skin and fat from various parts of the body including the abdomen (abdominoplasty), buttocks, thighs and upper arms. The surgical death rate of lipoplasty in America is higher than the death rate for motor vehicle accidents or homicides (Lapetina & Armstrong, 200). Several researchers including Lapetina & Armstrong (2002) comment that the death rate of lipoplasty in America may be in fact much higher than reported. Yoho et al. (2005) report that the mortality rate just from the general anesthesia administered during ECS is

1 in 13,000. These researchers warn that ***"...the morbidity and mortality rates from abdominoplasty remain unacceptably high."***

Injectable Soft Tissue Fillers

Injectable soft tissue fillers are used to mask wrinkles, swell lips or raise cheek-bones. Soft tissue fillers are categorized as "devices" and not drugs by the FDA. Numerous products are on the market and many evolve from one brand-name to another. Nearly all are temporary solutions lasting as short as a few months for up to six months. Sculptra® and Radiesse® which are "semi-permanent" fillers may last up to two years. These products require multiple treatments costing, in some cases, thousands of dollars. According to the American Society of Plastic Surgeons (2007) ArteFill® is a "permanent" soft tissue filler, yet may still require multiple applications.

Injectable soft tissue fillers may dissipate unevenly, causing disfigurement. All soft tissue fillers can result in adverse effects, with the non-biodegradable products more likely to cause severe, persistent and recurrent complications (Andre, 2005). Such adverse effects include: lumping; clumping; swelling; redness; granulomas; bruising; allergic reactions; itching; rash; pain; discoloration; numbness; and droopy eyelids.

The ***"off-Label"*** administration of prescription drugs permits physicians to administer a drug to a patient for conditions ***not approved for use by the FDA***. This is also true for devices such as injectable soft tissue fillers. So a

physician may inject a soft tissue filler in an area of the body or for a specific application that is not approved for use by the FDA. One essential interview question of the elective cosmetic surgeon, indeed any prospective physician, is whether he intends to use off-label drugs or medical devices in your surgical or non-surgical procedure.

Inpatient vs. Outpatient Surgery

A major risk of all surgeries is the administration of general anesthesia and sedation. ***The setting in which general anesthesia and sedation is administered is correlated to the risk of death or permanent neurologic injury.*** Hospital settings are considerably safer than non-hospital (outpatient) settings especially for ECS. Lapetina & Armstrong (2002) report that when a patient had an adverse reaction to general anesthesia or sedation in a hospital setting approximately 37% suffered permanent neurologic injury or died. ***In stark contrast when a patient had an adverse reaction to general anesthesia or sedation in a non-hospital setting approximately 93% suffered permanent neurologic injury or died.*** A primary reason for this disparity is that the physician operating in a non-hospital setting is often a solo practitioner without immediate access to the equipment, facilities and specialized physicians needed to respond to a medical emergency resulting from general anesthesia or sedation. Indeed the protocol for such surgical medical emergencies in a non-hospital setting is for the *cosmetic surgeon to dial 911.*

The Reality Totality

The majority of ECS procedures are preformed safely and to the reasonable satisfaction of the patient. However, there are men and women each year that undergo breast augmentation, “tummy-tucks”, rhinoplasty (nose-job) and scores of various cosmetic repairs and enhancements which result in the necessity of additional surgery; permanent neurologic injury; or death. Because ECS is “elective” the risks of surgery carry greater weight than surgery that is necessitated to cure illness, disorders or save a life. This is not said to discount the benefit of ECS resulting in the improvement of a person’s emotional health and social functioning. **The key task for the prospective ECS patient is to select a physician and in turn a surgical facility that will provide the maximum potential in performing the necessary screening, consultation, surgical expertise, risk management, and post-operative care associated with the ECS procedure.** A second step is to explore with your physician non-surgical remedies for your physical defect such as the use of cosmetics or dress. The one step you should not take is download a video clip of Dr. 90210 onto your I-Pod, cart it to the nearest ECS clinic and promptly schedule surgery to “...look just like her.”

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References

- American Society of Plastic Surgeons. (2007). Injectables at-a-glance. Posted at: http://www.plasticsurgery.org/media/press_releases/Injectables-at-a-Glance.cfm
- Andre, P, Lowe, N., Parc, A. et al. (2005). Adverse reactions to dermal fillers: a review of European experiences. *Journal of Cosmetic & Laser Therapy*, 3-4:171-6.
- Cook SA, Rosser R, Salmon P. (2006). Is cosmetic surgery an effective psychotherapeutic intervention? A systematic review of the evidence. *Journal of Plastic Reconstructive & Aesthetic Surgery*, 59(11):1133-51.
- Crerand CE., Franklin ME., & Sarwer DB. (2006) Body dysmorphic disorder and cosmetic surgery. *Journal of Plastic & Reconstructive Surgery*, 118(7):167e-80e
- Crockett, R., Pruzinsky, T. & Persing, J. (2007). The influence of plastic surgery “reality TV” on cosmetic surgery patient expectations and decision making. *Journal of Plastic & Reconstructive Surgery*, 120(1):316-24.
- Jakubietz, M., Jakubietz, R., Kloss, D. et al. (2007) Body dysmorphic disorder: diagnosis and approach. *Journal of Plastic & Reconstructive Surgery*, 119(6):1924-30.
- Lapetina, E. & Armstrong, E. (2002). Preventing errors in the outpatient setting: A tale of three states. *Health Affairs*, 21(4): 26-39.
- Lipworth, L., Nyren, M., Ye, W. et al. (2007) Excess mortality from suicide and other external causes of death among women with cosmetic breast implants. *Annals of Plastic Surgery*, 59(2):119-123.
- McGrath M. & Schooler W. (2004). Elective plastic surgical procedures in adolescence. *Adolescent Medicine Clinics*, 15(3):487-502
- McLaughlin J., Wise T. & Lipworth L. (2004). Increased risk of suicide among patients with breast implants: Do the epidemiologic data support psychiatric consultation? *Psychosomatics*, 45(4):277-80.
- Sarwer, D., Brown, G. & Evans, D. (2007). Cosmetic breast augmentation and suicide. *The American Journal of Psychiatry*, 164(7): 1006-13.
- Yoho R., Romaine J. & O’Neil D. (2005). Review of the liposuction, abdominoplasty, and face-lift mortality and morbidity risk literature. *Dermatologic Surgery*, 31(7 Pt 1):733-43.

Are Circumcised Males Less Likely To Contract HIV?

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benefits of circumcising the men far outweighed non-circumcision with regard to lowered rates of HIV infection. Men who were circumcised had a 55% (Uganda), 60% (Kenya) and 76% (South Africa) risk reduction of HIV infection as compared with men who were not circumcised.

There may be reasons other than male circumcision for the reduced risk of HIV infection in these particular studies. For example in the Kenyan study men's tribal affiliation was significantly correlated with HIV status, regardless of circumcision. (Shaffer et al., 2007). Among men in tribes with higher rates of HIV, the rate of sex reported with a commercial sex worker was significantly higher. In turn, men in tribes that were more monogamous had lower rates of HIV infection regardless of circumcision. Also, in comparison with uncircumcised men, the men who were circumcised were more likely to have had the procedure performed by a traditional practitioner (physician) versus a health care worker. In light of these findings, the influence of tribal affiliation and sexual practices on men's HIV status should be examined further before sweeping policy changes are made with regard to circumcision.

Critics of these recent studies warn that **male circumcision is not a "miracle solution"** for HIV transmission. (Butler & Odling-Smee, 2007).

They are concerned that some newly circumcised men may stop wearing condoms or increase their number of sex partners in light of these encouraging findings. Also, men who have sex before their circumcision wound heals could increase their chances of infection.

Male Circumcision in the U.S.

In the United States, 60-70% of infant boys are circumcised. The procedure usually is preformed after birth. Factors influencing the decision to circumcise male newborns include religion, culture, parents' preference, and health reasons. Parents who choose not to circumcise their son do so because of similar reasons, as well as the belief that there is no compelling medical benefit to male circumcision.

The American Academy of Pediatrics (AAP) does not recommend circumcision as a routine procedure, since it does not significantly promote a boy's well-being at birth. Rather, the AAP recommends that parents consult with their son's physician to gain a better understanding of the possible risks and benefits associated with circumcision in order to make an informed decision.

Adult men also choose to become circumcised. Most men who undergo this procedure do so because of medical reasons. (Fink, Carson & DeVellis, 2002). The most common medical reason is phimosis, a tightness of the foreskin that prevents it from retracting over the glans. As with any type of medical procedure, there are related risks. The most common complica-

tions of the procedure are minor infection and bleeding. Full recovery after circumcision typically requires four to six weeks of abstinence from masturbation and sexual activity.

Applicability of African Studies to the U.S.

HIV transmission in Africa occurs primarily through penile-vaginal intercourse. The major modes of HIV transmission in America are with **MSM** (men who have sexual behaviors with men) and drug IV (needle) use. This is not to discount the significant proportion of heterosexuals contracting HIV via penile-vaginal intercourse. Also, the overall HIV risk in the United States is much lower than in Africa; and more American men are circumcised than in Africa. The findings from the African studies have nonetheless peaked the interest of the American public health community. The *Centers for Disease Control* has recommended that additional research be conducted to evaluate the potential value, risks and feasibility of circumcision as a strategy to reduce HIV transmission in the U.S. As promising as these results are, it is important to remember that abstinence, reducing the number of sex partners and correct and consistent condom use are the most effective forms of protection against HIV transmission. Indeed, ***rubber latex condoms should be applied in all sexual behaviors involving the penis of both circumcised and uncircumcised males.***

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References

- Auvert B, Taljaard D, Lagarde E, Sobngwi-Tambekou J, Sitta R, & Puren, A. (2005). Randomized, controlled intervention trial of male circumcision for reduction of HIV infection risk: The ANRS 1265 trial. *Public Library of Science Medicine*, 11:e298.
- Bailey RC, Moses S, Parker CB, et al. (2007). Male circumcision for HIV prevention in young men in Kisumu, Kenya: a randomized controlled trial. *Lancet*, 369:643-656.
- Butler, D. & Odling-Smee, L. Circumcision for HIV needs follow-up. (2007). *Nature*, 447:1040-1041.
- Fink KS, Carson CC, DeVellis RF. (2002). Adult circumcision outcomes study: effect on erectile function, penile sensitivity, sexual activity and satisfaction. *Journal of Urology*, 167, 5:2113-2116.
- Gray RH, Kigozi G, Serwadda D, et al. (2007). Male circumcision for HIV prevention in men in Rakai, Uganda: a randomized trial. *Lancet*, 369:657-667.
- Shaffer D, Bautista C, Sateren W, Sawe F, Kiplangat S, Miruka A, Renzullo P, Scott P, Robb M, Michael N, Bix D. (2007). The protective effect of circumcision on HIV incidence in rural low-risk men circumcised predominantly by traditional circumcisers in Kenya: two-year follow-up of the Kericho HIV cohort study. *Journal of Acquired Immune Deficiency Syndrome*, 45,4:371-379.

Prescribing Medicines Based On Skin Color

by Rachel Torres, Ed.D.

The FDA recently approved the first race-based drug, BiDil, to treat heart failure specifically in African Americans (Brody & Hunt, 2006). Initially, the FDA had rejected the approval of this drug because it seemed to be ineffective in clinical trials involving the general population. However, these same clinical trials demonstrated a favorable response by African Americans prompting the company to investigate the effectiveness of the drug in persons of color. BiDil demonstrated effectiveness in persons of color and subsequently was approved for use by the FDA. BiDil's approval raises some interesting and controversial issues.

The idea behind BiDil is that higher mortality rates from heart failure are in part a result of biological or genetic differences among the races. It may be that different racial groups harbor different reasons for getting heart disease and/or different racial groups respond differently to heart disease medications (Risch et al. 2002). However, looking at race alone may be an overly simplistic view of how genetic make-up affects disease. One confounding issue is that persons of color represent a genetically diverse group of people. Their origins may be from different parts of the world such as Africa, the Caribbean and the United States. This genetic diversity may present a problem when prescribing medications based solely on the color of a person's skin.

There are indeed genetic diseases that can be found in large ethnic and racial groups. Diseases such as Tay-

Sachs or cystic fibrosis affect distinct ethnic/racial groups. However, heart disease is not presently linked to a specific gene trait. The current wisdom is that heart disease is influenced by many factors outside of genetic traits such as: socioeconomic status, environment and education. The danger here is that prescribing a drug that targets a disease in a specific ethnic/racial group may discount the influence that other factors may have in the onset and progression of the disease.

While there are issues about the feasibility of race-based drugs, it is important to acknowledge that this latest drug approval is moving medicine in a direction towards individualized or personalized medicine. We do have drugs that are targeted based on age and sex, so it may also make sense to look at drugs that target genetic differences. It remains to be seen how effective BiDil as a race prescribed medicine, will be in treating heart disease.

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References

- Risch, N., Burchard, E., Ziv, E & Tang H. (2002). Categorization of humans in biomedical research: genes, race and disease. *Genome Biology*, 1:3(7): Epub, 2002 Jul 1.
- Brody, H. & Hunt L. (2006). BiDil: Assessing a Race-Based Pharmaceutical. *Annals of Family Medicine*, 4(6): 482-483.