

Aging and cosmetic enhancement

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Abstract: Obsession with a youthful appearance has become commonplace in modern society and has resulted in an upswing in cosmetic procedures trying to reverse the aging process. We selectively review the literature on aging and cosmetic surgery, with particular regard for the aging face. We pay attention to psychosocial aspects of response to such cosmetic procedures, both in terms of outcome and with respect to risk factors for a poor outcome.

Keywords: aging, cosmetic surgery, facial rejuvenation, psychosocial outcomes, risk factors

Introduction

Modern western society is obsessed with achievement, youth, and beauty. Since the latter half of the 20th Century there has been an increasing focus on the body as a vehicle for identity and self expression, with a greater recognition of the role of appearance and the desire for self improvement. Youth has become valued and privileged above age and life experience. Beauty is the apparent new indicator of social worth. This contrasts with cultures where age is revered and elders are deferred to with respect.

However, the desire for beauty is not purely a late 20th Century phenomenon. Well documented beauty practices date back as far as Cleopatra's milk baths, the use of kohl to darken and enhance the eyes, vegetable dyes on cheeks and lips, and hair adornments. Historically, people have often undergone extreme discomfort and risk to conform to culturally prescribed modes of beauty including binding of the feet, ritual tattooing, and body scarification.

A contributing factor to the 21st Century obsession with beauty and perfection has been the significant development over the past two decades of the ways in which the body (particularly female) has been presented by the mass media and portrayed in advertising. The media is a significant force in convincing women, especially, that they are inadequate unless they package and present themselves in certain culturally sanctioned ways (Ring 2000). This has promoted increasingly impossible standards of beauty, which have progressively become more unrealistic and unattainable.

Although beauty practices have mainly been the domain of women, both sexes historically went to great lengths to beautify themselves. For example, in pre-Revolution 18th Century France, the Parisian lady and her male counterpart both wore heavily powdered faces, painted lips, false hair and wigs, and high heeled shoes.

Haiken (1997) has suggested that North American society became increasingly visual with heightened values attached to women's looks over the period since the Second World War. The emergence of Hollywood movie stars and the presence of fashion models in film, television, and the print media served to make "ideal" images accessible to greater numbers of people and to have a greater impact on the public consciousness. Appearance became a focal point for women and the pursuit of beauty was worth the time, money, and in some instances, the pain.

Throughout the latter part of the 20th Century, advances in medicine and nutrition, combined with an increasing awareness of individual healthcare, have enabled people

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to live longer, healthier, and more productive and active lives. As the population ages, more people are seeking ways of enhancing their appearance for personal and professional reasons. Beauty and youth are becoming significant determinants of economic security, and to appear well groomed and confident, and remain viable in the workplace, middle aged women, especially, began seeing the growing speciality of cosmetic surgery as a solution to the "tyranny" of middle age. A 1958 study (Edgerton et al), found the typical facelift patient to be a married, upper-middle class, socially active woman who was grateful for and enthusiastic about their enhanced appearance.

The preoccupation with appearance extends across the life span with each stage creating distinct psychological reactions to the body (Goin and Goin 1981). However, the loss of youth and the onset of middle age (between 40 and 60 years) are significant because of negative stereotypes and myths associated with aging, and the critical psychosocial realities of this growing group.

Life roles alter with age through events such as the death of parents or partners, disruption of relationships due to ill-health, children leaving the family home, and loss of vocational status. For women, the physiological signs of aging have been further perceived as being symptomatic of the loss of femininity, sexual identity, social power, and social visibility (Featherstone 1995). All these factors serve to enhance dissatisfaction with looking old, and increase a desire to try to look younger.

The aging face

As people age, their concerns about their appearance increasingly focuses on the face. For example, Goodman (1994) interviewed 24 women, 12 of whom had undergone cosmetic surgery, and 12 of whom had not. Ages ranged from 29 to 75 years. The younger women were mostly concerned about the shape and appearance of their bodies, whilst the older women were preoccupied with their faces. In particular, the older women disliked wrinkles and drooping skin, and had undergone facelifts, chemical peels, and chin tucks.

What actually happens to facial appearance as we age? Intrinsic aging processes include loss of skin elasticity and collagen, along with fat atrophy. Extrinsic factors, notably solar radiation, damage the dermis, with affects on collagen and elastic fibres (Demas and Braun 2001). Other factors that can contribute to an aged appearance to the face include general poor health, an unhealthy diet, cigarette smoking, and alcohol.

Demas and Braun (2001) outline the signs of the aging face:

- A lined forehead;
- Drooping brows, with a hooded appearance to the lateral upper lid;
- Loss of cheek roundedness and deep nasolabial folds secondary to loss of subcutaneous fat;
- Sagging neck lines consequent upon loss of platysma muscle tone;
- Loss of chin definition, from submental fat deposition;
- Drooping of the nasal tissues; and
- Wrinkling of the skin around the mouth, with thinning of the lips.

The aged appearance can be emphasized by other skin damage, such as melanocytic pigmentation, as well as hair loss. Loss of teeth can also make the contours of the mouth less defined.

These physical signs of facial aging are perceived by some people as a threat to self-continuity and are reacted to like a disease to be deplored and eradicated (Poole and Feldman 1999). Rather than being regarded as a completely natural time-ordered and predictable part of life, aging is increasingly represented as a pathological condition in need of correction or repair; a "disease", which modern medicine must combat.

Cosmetic enhancement in the elderly

Increased demand for "aesthetic" or cosmetic surgery (over the past 20 years) has been reflected in the changing attitudes to youth and beauty. According to the American Society of Plastic Surgeons, more than 8.7 million people underwent cosmetic surgery in 2003, an increase of 33% from the year before, and a massive increase of 1698% since 1992 (ASPS 2004). In Australia, accurate statistics for cosmetic/aesthetic procedures are not available as there is no centralized statistical authority or statutory data collection requirements. However, based on estimates of 350 surgeons, the New South Wales (NSW) Cosmetic Surgery Inquiry into Cosmetic Surgery (HCCC 1999) established that the local industry had doubled over the 5 years preceding 1998 with approximately 52 000 surgical procedures and 250 000 cosmetic medical procedures performed in 1998 alone. This rate of growth is regarded comparable per capita with that of the US, with aesthetic surgery now one of the most popular strategies available in Australia to achieve and maintain a socially acceptable appearance (Ring 2000).

The motivations for individuals undergoing surgery to try to reinstate a youthful appearance are complex. Figueroa (2003) emphasizes the role of self-esteem, and how a poor body image impacts upon self esteem. In particular, she points to one of the motivations for cosmetic surgery being a “perceived inability to carry out a public role” as a driving force for cosmetic procedures. This motivation is obvious in people such as actors, but is also impacting on competitiveness for other jobs. In particular, males, often executives, are increasingly likely to opt for cosmetic procedures to make them look younger, in the belief that this will enhance their job prospects. According to the British Association of Aesthetic Plastic Surgeons, males now account for some 10% of cosmetic surgery clientele, compared with 5% five years ago. The most popular procedure for men, who typically present in their 50s, is eyelid surgery or a brow lift. Botox is becoming an increasingly popular noninvasive option.

Allen (2003) considers that aesthetic surgery is one component of the evolving field of antiaging medicine that has been designed as “the application of knowledge that delays the physical and mental deterioration associated with senescence to the end of life”. In this antiaging context, aesthetic surgery has been referred to as “rejuvenative” and is performed mostly on the face to modify the signs of aging for those who wish to have their appearance restored to what it was previously. Some refinement of features may also be undertaken at the same time. Such surgery may be carried out to try to avoid the negative stereotyping of aging.

This contrasts with “transformative surgery” designed to change features, such as refining a large nose, and is more commonly done in the younger years. Some specific procedures are age-related such as liposuction, eyelid rejuvenation, facelifts, browlifts, chemical peels, dermabrasion, and laser resurfacing, which were selected by patients between the ages of 40 and 60 years (Demas and Braun 2001). According to Mendelson (1992), significant improvements in facial rejuvenative surgery based on the correction of anatomical layers supporting facial features instead of a “nip and tuck”, have had a major impact on outcome quality and have contributed to the increasing numbers of patients seeking surgery. In Australia, the NSW Inquiry into Cosmetic Surgery (HCCC 1999) has estimated that women aged between 45 and 59 years, who underwent mostly rejuvenative surgery, comprised 32.1% (the largest proportion) of all cosmetic surgery procedures surveyed for the study.

Cosmetic surgery for aging skin is also a rapidly growing field in dermatology. Advanced techniques that promise less invasive procedures and a swifter recovery make surgery seem less frightening, especially for first time patients. It has been mooted by some researchers in the field that the preoccupation with appearance and the human body is partly due to these rapid technological advances (Jefferson 1976). According to Ringel (1998), biotechnological advances in such areas as laser surgery (which has shed its science fiction image and become a significant tool against aging skin [Greely 2000]), chemical peels, and liposuction have made it possible to erase signs of aging that previously were considered indelible.

According to the American Academy of Cosmetic Surgery, nearly 170 000 men and women underwent laser resurfacing of the face in 1998, up from 138 800 in 1996 (a 64% increase) (AACS 2005). Laser resurfacing is considered effective because superficial layers of facial skin are vaporized, removing wrinkles and lines, and leaving new skin to grow. Other forms of facial rejuvenation include “injectibles” such as collagen (to remove lines around the mouth), and restalayne and hyalaform (to help plump out wrinkles and give lips a fuller look). Botox is an increasingly common therapy, which is the injection of a muscle paralyzing toxin that blocks impulses from nerves to muscles related to expression lines and effectively flattens out frown lines around the mouth and eyes. Estimated expenditure in the US in 2004 on Botox was \$1 125 220 232. Also popular is fat transfer, where fat harvested from the abdomen or thighs is injected into the face to augment subcutaneous tissue of the face.

Cosmetic enhancement, body image, and psychological wellbeing

The ostensible objective of aesthetic surgery is to improve the patient’s psychological well-being by modifying their body image. Body image is the mental picture individuals have in their mind’s eye of how they appear to others. This perception is influenced by each individual’s beliefs and attitudes and is shaped by developmental, perceptual, and socio-cultural influences (Sarwer et al 1998). An understanding of body image and its perturbations is of profound importance to plastic and aesthetic surgeons, because without a clear understanding of the patient’s body image and physical concerns, it may prove impossible to understand the motivations, fears, and expectations of the patient undergoing aesthetic surgery. Body image is not a

static phenomenon. It changes in response to lifestyle events and situational factors including puberty, pregnancy, disability, illness, surgery, menopause, and aging (WHQ 2000). Body image is closely aligned to self-image and self-esteem.

Body image has become a significant factor in the request for aesthetic surgery and this is reinforced by several review articles that have investigated psychological issues in aesthetic and plastic surgery (Pruzinsky 1993; Sarwer et al 1998; Hasan 2000; Honigman et al 2004). Researchers in this field have recently deviated from the historical framework of looking for psychopathology in aesthetic surgery patients as a basis for understanding their motivation for cosmetic interventions, and have acknowledged the relevance of the individual's "body image" as a more appropriate starting point for understanding the motivations for requests for aesthetic surgery.

The literature on body image in the elderly suggests that appearance is a motivating factor for surgery, and body image as a determinant of psychological well-being. Fookien (1994) found that body image was a greater significance in the development and maintenance of sexual interest in the elderly than was physical health. This study validates the observations of Goin and Goin (1981), Pruzinsky (1993) and Sarwer et al (1998), who concur in the view that it is body image which is ultimately linked to appearance and is a significant motivator throughout one's life.

Aging and psychosocial aspects of cosmetic enhancement

The anticipated outcome of cosmetic procedures for the aging face is to improve the patient's emotional and psychological well-being through attempting to negate the physical effects of aging by enhancing appearance. The psychological aspects of cosmetic surgical procedures for the aging face such as facelifts have been explored by various researchers over the past 30 years (Webb et al 1965; Goin et al 1976, 1980; Goin and Goin 1981).

An early study by Edgerton et al (1964) specifically addressed facelift procedures for the aging face and found a mean sample age of women aged 48 years reported high rates of satisfaction and improved well-being (86%). In their study of 50 female facelift patients, Goin et al (1980) found that postoperative depression was common following surgery, but only in patients with pre-existing clinically diagnosed depression. However, Goin and colleagues did

not follow patients beyond 6 months postsurgery, so long-term outcomes are unknown. Interestingly, the same study found that patients who desired an improved self-image pre-operatively had a greater possibility of experiencing postoperative psychological improvement. In a review of 37 studies Honigman et al (2004) looked at psychological and psychosocial outcomes following varying cosmetic procedures, concluding that most people appeared satisfied with the outcomes (see below).

Patients seeking surgery for the aging face do so for many reasons and researchers have suggested there are two major categories of motivation for surgery: internal and external (Grossbart and Sarwer 1999). Internally motivated patients are generally more committed to physical change and are therefore better patients, who were usually more satisfied with the outcome. Externally motivated patients are hoping to change not only their bodies, but also their lives, often to please others, and are often dissatisfied with the outcome if their lives do not change as imagined following surgery. Other factors which risk unsatisfactory outcomes include: postoperative infection; the procedure going wrong with a need for further surgery; psychosocial risks such as the timing of the surgery (a recent concern with appearance may suggest a crisis situation rather than a considered approach to surgery); realistic expectations of postoperative physical and psychosocial appearance; adequate physical and emotional family support during the postoperative period; a good relationship with the medical and nursing team; and relatively good physical health.

When considering the aging person's request for cosmetic enhancement, it is as well to bear in mind the factors that seem to predict a good or poor psychosocial outcome from such procedures in general. In a review of the world literature, Honigman et al (2004) found that predictors across all ages of a poor outcome in psychosocial terms (ie, psychological parameters such as self-esteem, social confidence, and social outcomes such as relationships and work) included:

- Being male: perhaps males have a higher threshold for seeking cosmetic interventions, and are thus more severely affected by the time they actually undergo the procedure;
- Being young: older people had a better outcome, in general, but this might have been confounded by the fact that a number of the larger studies included in the review were of older individuals specifically seeking antiaging procedures for the face;

- Being motivated by the desire to please someone else: for example, to try to save a relationship, or because your partner wants you to have the procedure;
- Underlying psychiatric problems such as depression or personality disorder;
- Unrealistic expectations of surgery, both in terms of what could actually be achieved physically, and in terms of what impact the cosmetic change would have on life in general: for example, those seeing it as a panacea for all their life problems;
- Having a “minimal deformity”, such that to the objective viewer there is nothing or very little physically “wrong”: Some people with an excessive concern with a slight or objectively absent physical “deformity” have a psychiatric disorder called body dysmorphic disorder (BDD), which requires specific psychiatric and psychological treatment. BDD is not particularly a late life disorder, usually having an onset in youth, but it can persist into old age. A full review of BDD is beyond the scope of this article, but the interested reader is referred to Phillips and Castle (2002);
- People who have had multiple previous cosmetic procedures with which they are unhappy.

It is difficult to extrapolate from these findings specifically to an aging population of people seeking cosmetic enhancement, but there is no reason to suspect that these factors are any less important in that group. Indeed, some risk factors may be particularly associated with older age, eg, relationship issues and depression. Such parameters need to be screened for in people seeking cosmetic enhancement. In the elderly, particular attention should be paid to why they are seeking the procedure at that time, and what their expectations are for the procedure (eg, have they recently been bereaved, and believe that the cosmetic procedure will help them find another partner?).

Conclusions

The massive growth of the “looks industry” in recent years has not passed by the aging population. Indeed, much advertising and social pressure is specifically aimed at trying to get people to pay money to stop themselves from looking old. It seems our Western society increasingly denigrates rather than reveres the elderly. We need to try to ensure that the pressures on the elderly to look young do not create unrealistic expectations and lead to older people spending significant proportions of their savings on procedures that cannot turn back time.

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