**Background: Aesthetic Genital Surgery (September) 2012**

Aesthetic genital surgery includes a number of key procedures

1. **Labiaplasty+/clitoral hoodectomy or repositioning**
   - Reduction of labia minora
   - Involves labial trimming or wedge resection

2. **Vaginal tightening**
   - Fat injection/surgical repair (e.g. posterior repair)

3. **Augmentation of the labia majora**
   - Fat transfers/grafts/injection

4. **Hitching and recontouring of mons pubis**
   - Correction of mons pubis droop

5. **G spot amplification** - collagen injection

6. **Others**: laser “vaginal rejuvenation”/hymenoplasty

A large literature review carried out by Liao (2) on labial surgery identified 18 comprehensive surgical studies that had included a total of 937 cases between the years of 1950 to 2009. Aesthetic improvement was the main indication for surgery in all papers. In majority of the papers however, no attempt were made to compare patients’ preoperative labial dimensions against the published norms to see whether surgery is indicated (1).

Functional improvements are also mentioned as indication for surgery in all of the papers but to a lesser degree, including the inability to wear tight underwear or pants and discomfort on sitting or whilst exercising. Other indications include: difficulty in urination, chronic yeast infections and personal hygienic concerns. However, vaginal surgery carried out for no other reason than to enhance appearance is only available privately.

Anecdotes of psychological and sexual difficulties were also offered as indications, including poor self-esteem, teasing by siblings and parental concern. Interestingly, none of the papers referred to nonsurgical solutions as a possibility and the nature of these complaints has not been investigated.

Other studies also discussed more hidden indications for surgery including women’s perception that their labia were “abnormal” (which may be fuelled by media displaying genital illustrations that are selective and possibly digitally altered) and their unrealistic expectations about the impact of surgery on their sexual confidence or their partner’s behaviour. Bramwell (2007). In these cases referral for psychosexual counselling is more appropriate.

In a french study by Rouzier (4), the records of 163 patients who underwent labiaplasty during a 9-year period were analyzed. The ages of the patients ranged from 12 to 67 years (median, 26). Motives for requesting surgery were aesthetic concerns in 87% of the cases, discomfort in clothing in 64%, discomfort with exercise in 26%, and entry dyspareunia in 43%. Anatomic results were assessed 1 month postoperatively.
Most reports look at technical aspects of surgery and outcome data are sparse, partially due to a significant proportion performed under the private sector and the lack of quality studies. (No prospective, randomised or controlled studies were found.)

Of the published data on post-operative follow-up, most are short termed, ranging from 1 - 3 months to a follow up of 6 years (in only a proportion of patients in a few studies). Majority of authors claimed high levels of patient satisfaction and contained anecdotes pertaining to success, but lacked methodological rigor.

Of the data available patient’s satisfaction with cosmetics (91–100%) and physical improvement (93–98%) was very high. Psychosocial reports are limited. Only one study elicited postoperative verbal reports of sexual function based on non-statistically proven questionnaires, and stated that 71% of women reported an ‘improved sex life’.

Long-term aesthetic, functional and psychological outcomes are poorly understood and lacking. Morbidities following FGAS are underreported but include psychosocial, aesthetic and functional problems such as neurovascular injury, infection, bleeding, adhesions, poor scarring, dyspareunia, impaired sexual sensitivity or function (vaginoplasty following posterior approach): 20% and re-operation (rates of which in 2 large case series were 2.9% and 7%; indications for re-operation included wound dehiscence and dissatisfaction with appearance).

Goodman’s (5) cross-sectional study, included 258 women and encompassing 341 separate procedures. Combining the three groups, 91.6% of patients were satisfied with the results of their surgery after a 6-42 month follow-up. Significant subjective enhancement in sexual functioning for both women and their sexual partners was noted (p = 0.0078), especially in patients undergoing vaginal tightening/perineal support procedures.

Liao (2) literature review of labiaplasty: In terms of the incidence and nature of complications, 5/18 papers did not address this topic, 8 specified that there were no complications and 6 reported the presence of complications, with 5 offering details that included infection, bleeding and wound dehiscence. Fifteen reports did not address gynaecological or obstetric problems, and the remaining three reported only that there was no dyspareunia after surgery.

In the US, there is a 30% increase in all kinds of FGAS operations performed in 2 consecutive years between 2005 and 2007. Currently, the no. of FGAS cases recorded is approximately >4500/year (American Society for Plastic Surgeon’s website. http://www.plasticsurgery.org.)

Literature review shows that majority of procedures were performed on patients between the ages of 16 - 35 years. It’s alarming that a large number of procedures are performed on adolescents, and even on young children. The labia minora continue to develop in childhood and, especially, in adolescence. Any asymmetry may correct itself during pubertal development; any surgical interventions may lead to further asymmetry prompting more operations.

We have established that professional bodies have ethical and scientific reasons for concerns about female genital cosmetic surgery. Yet our literature review revealed that there are no stringent guidelines, other than general advice on FGAS practice, provided by health care authorities, regulatory bodies or professional organisations such as the British Association of Aesthetic Plastic Surgeons (BAAPS).
Lack of quality multidisciplinary studies published in peer reviewed journals are of a primary concern. Focus should be made to examine women’s concerns about their genitals in-order to define criteria of clinical effectiveness.

Proof of principle will be the next stage. Prospective evaluation must focus on morphological, physical, psychological and sexual parameters, and on adverse events. Randomised controlled methodology will ultimately be required.

The current advice been given in the USA and the UK to patients and physicians is to carefully consider the options. The Department of Health publication Plastic Surgery: Information for Patients offers specific guidance on surgery for labial reduction (13). It advises patients not to undergo cosmetic surgery lightly and to consider discussion with a health professional, such as a general practitioner, counselor or psychologist on alternative treatment, especially if concerns regarding their appearance result from other anxieties.

The growing publicity around genital cosmetic surgery has prompted the American College of Obstetricians and Gynecologists (ACOG) to release an official opinion on the topic. In Sept. 2007, the American College of Obstetricians and Gynecologists has stated that it is “deceptive to give the impression” that these procedures are “accepted and routine surgical practices.” Procedures such as vaginal rejuvenation, revirgination and G-spot amplification) are not medically indicated, because there is insufficient documentation of the safety and effectiveness of these procedures.

However some procedures are medically indicated, including labiaplasty for the treatment of labial hypertrophy (increased labia size/bulk) or asymmetrical labial growth (14). Clinicians should evaluate the need for surgical intervention and inform the women about the lack of adequate data supporting the efficacy of these procedures and the potential complications, including infection, altered sensation, dyspareunia, adhesions and scarring, should be explained.

Health care professionals should have a greater awareness of the variations of what constitutes normal genitals. Alternative treatments such as psychosocial support should be sought where appropriate. Similar opinions are echoed in the UK and Australia. Labiaplasty is controversial amongst both healthcare professionals and non healthcare professionals. It is on the increase whether been driven by marketing, or by an unhealthy self-image derived from media images or not, it is on the increase. exponentially, which is in itself generating a growing vicious market for this surgery. This is not matched and supported by more stringent evidence-based surgical practice, regulations or guidelines on a local or national level which means practice is likely to remain idiosyncratic.

FGAS surgery poses an unresolved dilemma to both the women who seek such surgery and the health professional. As a result women are being unnecessarily exposed to the risks of surgery. FGAS have not proven long term benefits. This could also undermine the development of other ways to help women and girls to deal with concerns about their appearance in general. Surgery is rarely an answer to psychological problems.

Greater awareness and research into the negative psychosocial thought processes that women follow in their decisions to undergo cosmetic surgery and alternative interventions are warranted, particularly in the community. Sufficient training in sexual medicine is required for all health care professionals especially for genital plastic surgeons.
References