

Laser vaginal rejuvenation: not ready for prime time

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Various surgical management options are currently available to alter the appearance of the female genital tract. Such operations for cosmetic reasons are many and include vulvoplasty, vaginoplasty, labiaplasty, perineoplasty, hymenoplasty. Some of these interventions have been studied in small trials assessing surgical technique, patient satisfaction, postoperative complications and surgical outcome [1]. Despite one article conceiving the idea that such management may be, in some way, akin to female genital mutilation type IV [2], this particular debate remains beyond the scope of the article. This editorial seeks to highlight some of the questions, which may arise when consulting with a woman who seeks advice for surgical management of her genital appearance or sexual dysfunction and will focus on one particular practice that may be offered by the gynaecologist, so-called “laser vaginal rejuvenation”.

Vaginal rejuvenation has become a commonly practised, yet poorly evidence-based, intervention offered by surgeons often driven by a high demand from patients requiring either cosmetic alteration to the appearance of their vagina or management of sexual dysfunction experienced by them and their partner. Demand alone for the procedure, however, cannot justify the marketing, recommendation or provision of such a vastly under-studied surgical intervention which should otherwise be deemed unethical to practice in the absence of robust clinical data from prospective, randomized controlled trials.

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Laser vaginal rejuvenation is described as a surgical technique indicated for the enhancement of sexual function in women who report reduced vaginal sensation during penetrative sexual intercourse. It has also been offered to women who have fibrosis or scarring of the vaginal mucosal wall as a result of episiotomy or tear following childbirth or previous vaginal surgery. Unsurprisingly, the major source of any literature describing laser vaginal rejuvenation techniques is through unregulated internet search engines that direct the searcher to various international ‘centres of cosmetic and aesthetic surgery’. Unavoidably the descriptions of the technique are in layman’s terms at best. The general consensus is that laser vaginal rejuvenation surgery, as the most common cosmetic vaginal surgical technique, is offered as an outpatient procedure, and is easily performed by a general gynaecological surgeon under regional anaesthesia. The procedure is described to be relatively bloodless and the surgical indications are reported to be “vaginal wall laxity”, “reduced sensation during sexual intercourse” and “pain during intercourse”. The general consensus is that it does not necessarily alter the appearance of the vulva or vagina externally.

Although there are various methods described for the application of the CO₂ laser, the commonest surgical technique referenced describes a form of tissue remodelling and so-called ‘tightening’ within the vaginal mucosa as a result of the contraction of collagen mediated by the ablative and thermal effects of the CO₂ laser.

Despite the wide use of laser vaginal rejuvenation, it is the opinion of the authors that there exist several concerns and limitations surrounding this cosmetic surgical technique that neither justify nor support its use in current clinical practice. Firstly, at the time of writing, there is still a lack of scientific data on the efficacy of the technique. Furthermore, other than a few limited case series, very little is documented in the literature on the surgical indications, standardization of the technique, complication rates or definitions of a successful

surgical outcome. Therefore the authors emphasize the paramount importance of good-quality, prospective randomized clinical trials to provide efficacy and safety data for laser vaginal rejuvenation before offering it as a viable surgical option to women seeking laser vaginal rejuvenation therapy. Secondly, the safety of the procedure must be studied in greater detail. It is the opinion of the authors that tissue damage, adhesions and scarring as result of laser vaginal rejuvenation surgery may potentiate dyspareunia, urogenital pain and vulval/vaginal discomfort. Thirdly, there remain the unknown distal effects of the laser on proximal organs such as the rectum, urethra and bladder or the pelvic vessels and nerves. Compounding these limitations is our rudimentary understanding of the procedure and its mode of action, with very little guidance in place to standardize surgical practice. Finally, and perhaps most importantly, if reliable surgical outcome data become available and these flaws are correctly addressed, an international multidisciplinary body should provide guidance, indications, accreditation, training and support to surgeons who seek to offer laser vaginal rejuvenation to women.

In conclusion, if this practice is to be endorsed through professional and nonharmful practice there need to be robust clinical trials as well as high-quality subjective and objective clinical outcome data to assess the benefits, the effects and the risks of surgery, in addition to identifying the ideal candidates for this intervention before it can be appropriately offered.

Patients should be carefully counselled that laser vaginal rejuvenation has little basis in evidence as an option for either

cosmetic enhancement of the vagina or management of sexual dysfunction. Rather, it is the responsibility of the gynaecological surgeon to provide reassurance to women seeking surgical intervention that there exists a great deal of variation in normal external vaginal appearance and to offer appropriate counselling to women seeking advice for management of sexual dysfunction. Until more data providing strong evidence for the safety and efficacy are published and widely available, the role of laser vaginal rejuvenation in either context remains untenable.

Conflict of interest The authors declare that they have no conflict of interest.

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