

Moving from Critical clitoridectomy?

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As physicians and surgeons our cultural inheritance is at times opaque with unknown consequences. The female body parts responsible for sexual pleasure, particularly the clitoris, would appear to have been dealt a particularly rough cultural and historical card. But is the situation improving?

Vesalius, the father of anatomy, is famous for great knowledge built on decades of systematic dissection (1538-1564). On the topic of the clitoris though, Fallopi and Colombo claimed to have discovered the clitoris while Vesalius refuted their claims regarding the organ: "A new and useless part" ¹.

Female genital mutilation (FGM) in sub-Saharan Africa and then its progressive distribution across the Islamic world seems an extreme form of cultural misogyny. The 'End FGM' movement is gaining traction across the globe as deliberate harm to the genitals of young females is increasingly outlawed and reviled². Optimism regarding outlawing of the practice in Sudan was recently tempered by the reality that despite illegality, the practice continues to be common in countries such as Egypt.

This raises the important question; is that cultural inheritance so far from our own recent history and scientific culture?

Isaac Baker Brown, a leading figure in 19th century Obstetrics and Gynaecology and president of the Medical Society of London, published in 1866 the book "On The Curability of Certain Forms of Insanity, Catalepsy, and Hysteria in Females"³. This book promoted clitoridectomy as a cure for the female weaknesses listed in the title. Having enjoyed an elevated position, his peers ultimately rose up in protest to what was being popularised among their sisters and mothers. He defended himself: 'I say, if you condemn the operation

of clitoridectomy, and call it quackery, be honest men and have it investigated scientifically⁴.

Anthropologist Elizabeth Sheehan concluded her summary of this peculiar episode in history by stating:

'As wrong as he was in advocating this "harmless operative procedure", the scientific investigation that Brown had called for to justify his methods might have helped dispel some of the myths concerning female anatomy and psychology that flourished in the secrecy of the medical profession and in the social mores of the times⁴.

Although Brown was eventually expelled from the British medical establishment, this did little to discredit the medical reasoning behind clitoridectomy. In fact, despite providing a scathing review of Brown's practice, the British Medical Journal had upheld the belief that masturbation could cause such disorders in women⁴. It was clear that many senior clinicians in the US continued to perform clitoridectomy for emotional disorders. This was evident in an 1859 study 'Woman: Her Diseases and Remedies' by Charles Meig⁵, in this case 'curing' a nine-year old 'nymphomaniac'. As late as 1897 'A System of Gynaecology' by Thomas Allbutt recorded the excision of the associated labia minora as successful to restore a highly neurotic girl 'from a state of chronic individualism to one of health and usefulness'.⁶

Sheehan offered the memorable quote : "The 19th century medical profession wanted it both ways: the clitoris was so unimportant to a normal women as to not be missed if removed, yet lurking in its tissue was the greatest threat to female welfare ever known." ⁴

A learned Gynaecology colleague reached out recently praising the studies on clitoral anatomy that we have performed at the University of Melbourne ^{7,8}. Their concern though was, the observation that they never (or nearly so) see any literature or study on the organ that seems so reasonably important to women and part of the purview of Gynaecology.

This prompted a review of Australian and New Zealand literature relevant to this organ. Terms "clitoris", "clitoral", "vestibule", "vestibular", "vulva", "vulvae", "cavernous", "cavernosum" and "glans" were searched in EMBASE (1947 – present) with country of origin set as Australia or New Zealand and results limited to female. 470 results were sorted into journal of origin. 81 records were manually reviewed to identify those relevant to the clitoris and its anatomy or function, yielding 3 results. An important article on aspects of

abandonment of FGM in 2014 was noted⁹ as was a case report on labial fusion as a complication of circumcision¹⁰. One case report mentioned its location in space, explaining the involvement of the clitoris in a traumatic delivery, describing that the right labium minus was split longitudinally along its length, 'reaching almost to the clitoris'¹¹. There were no articles in this journal able to be identified as containing descriptive anatomy regarding the clitoris per se.

The search was expanded to the international literature using more direct terms "clitoris" or "clitoral" in both EMBASE and MEDLINE. Duplicates were auto-identified and deleted in endnote. 6151 articles were searched in endnote for the terms "anatomy" and "anatomical" in all fields. This resulted in 930 records which were screened for the term "dissection". These 124 records were then manually reviewed to identify those that could be justified as being directly relevant to the clitoris and its anatomy. This yielded 11 articles on the anatomical dissections of the clitoris and four articles relating to the anatomy of the dorsal nerve of the clitoris. 62 articles were found on clitoral reconstruction and interventions related to FGM and its related complications. Of these, 32 articles were on defibulation and surgical separation of fused labia; a further 21 studies, mostly case reports addressing the excision of cysts with some form of reconstruction of the clitoris and/or labia; and nine studies on clitoral/clitorolabial reconstructive surgery.

It is worth noting that even within the studies identified as providing good scientific methods to clarify the anatomy of this organ, many related to dealing with the complications of procedures undertaken to rid a woman of this structure. And yet still, despite the work of commendable clinicians to develop intricate procedures to expose the clitoris to restore sensation following FGM¹², we see literature doubting the importance of female orgasm, entertaining the argument that from an evolutionary standpoint, female orgasm could merely be a by-product of selection on male orgasm and may not have a role to play in reproduction¹³.

So continues the underrepresentation of female biology in scientific texts. Moore and Clarke commented on the history of diminutive and apparently functionless graphic representations of the clitoris, directing us to the term 'Critical Clitoridectomy' coined by Paula Bennett as an apt descriptor for the scarcity of literature or study related to this body part¹⁴. Even more concerning, their review of clitoral anatomy in anatomical texts across the 20th century found less rather than more detail and labelling of the clitoris over successive editions¹⁴.

The cultural affliction placing female body parts in a position of inferiority is typical of anatomy itself. A review of Anatomy textbooks per se demonstrated the extent to which male anatomy is presented as the norm, the female version being provided in parentheses or as an afterword, and illustrations placing female organs in space reserved for the necessary illustration of reproductive organs, sometimes with added descriptors such as small or weak to highlight the difference^{15,16}. After a detailed description of the dorsal penile nerve Gray's anatomy, it is said that "in the female the corresponding nerve (dorsal nerve of the clitoris) is very small and supplies the clitoris"¹⁷. Nothing else is provided. Aside from being incorrect, the dorsal nerve being 2mm in diameter as it passes from lateral to medial on the under-surface of the ischiopubic ramus, is potentially in the firing line in some of our operations. Techniques for ACT balloons and minimally invasive slings have been trialled in cadaver studies which have enabled determination of essential angles of instrumentation to avoid clitoral tissue^{18,19}.

Images of female genital anatomy are changing, as is awareness of the sexual potential locked in female organs. Recent work by Gynaecologist Abdulcadir and colleagues¹² has used modern imaging technology to provide an opportunity to revisit the place the clitoris takes up, presented as the centre of the analysis rather than faded or blanked out. Their 3D reconstructions, including that of the clitoris following FGM, hold enormous potential for education and healing. Can we as professionals and surgeons, do more than mitigate against or rectify harm and disease. We have moved beyond the position of Isaac Baker Brown placing the clinicians as the guardians of female acquiescence and purity. We understand clitoral and vaginal anatomy and can provide a clinical and academic lead to the community movement known as "Cliteracy" promoted by many including artist Sophia Wallace²⁰. This force is growing, its worthy goal to foster women's self-knowledge and the worthwhile pursuit of sexual health and pleasure.

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