



The riddle of the sands: circumcision, history, and myth

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Abstract

Although many nineteenth century misconceptions about the foreskin have been dispelled since Douglas Gairdner showed that infantile phimosis was not a congenital defect, other old ideas have proved more persistent. Among the most ubiquitous are the proposition that ritual or religious circumcision arose as a hygiene or sanitary measure; and the related idea that allied troops serving in the Middle East during the Second World War were subject to such severe epidemics of balanitis that mass circumcision was necessary. Both these claims are medical urban myths which should be firmly laid to rest.

In a recent article on the ethics of circumcising male minors, JM Hutson stated that circumcision was 'likely to have arisen as an early public health measure for preventing recurrent balanitis, caused by sand accumulating under the foreskin.'¹ A similar statement appears in the policy statement on circumcision issued by the Royal Australasian College of Physicians in 2002: 'Circumcision of males has been undertaken for religious and cultural reasons for many thousands of years. It probably originated as a hygienic measure in communities living in hot, dusty and dry environments.'² No reference was given for either of these claims, and both are questionable.

The idea that circumcision protects the penis, and more especially the glans, from irritation by sand is counter-intuitive. One's natural assumption is that the foreskin guards the glans and meatus from irritation by shielding them from dust and other forms of dirt. This function seems more likely in boys before puberty, when the foreskin is usually longer and less frequently retracted—a point consistent with the fact that most circumcising tribes perform the operation at puberty or later.³ Yet the claim that circumcision protects against sand irritation appears regularly in medical journals, both as an explanation for the ancient origin of ritual circumcision in tribal societies, and as a medical justification for its performance in the twentieth century. What is the evidence for this?

Many primitive cultures carried out various mutilating procedures on different parts of the body, including the genitals of both boys and girls, but the origins and rationale of these practices are obscure and contested, as are the environmental conditions prevailing when such customs emerged. Such societies also practised human sacrifice, widow-burial, foot-binding, scarification, tattooing, piercing, infibulation, head or nose shaping, tooth evulsion, etc.

The idea that these rituals must have a utilitarian basis emerged in the eighteenth century, when Enlightenment thinkers sought naturalistic explanations for phenomena formerly regarded as miracles or attributed to the will of the Deity. Denis Diderot embodied this trend when he suggested that infibulation of women in some tribal societies originated as a birth control measure and only later acquired supernatural

sanction.⁴ Modern anthropology recognises that such customs emerge from the belief structure or cosmology of the cultures which produced them and do not necessarily have utilitarian significance.⁵

Conflicting theories have been advanced to account for ritual operations on the male and female genitals, among which are the following:

- A propitiatory sacrifice or sign of submission to a deity, probably a milder form of a ritual which began as outright human sacrifice.
- An offering to the god or goddess of fertility to ensure children.
- A mark of tribal identification.
- A rite of passage from childhood to adult responsibility.
- The imposition of adult and tribal authority at a time when youthful rebellion might be expected (in the case of boys circumcised at puberty).
- A fertility rite, aimed at giving men the power of procreation by making them shed blood from their genitals like women.
- An attempt to emphasise feminine or masculine characteristics in girls and boys by removing the parts of the genitals (clitoris and foreskin) believed to resemble the genitals of the other sex.
- A means of humiliating and marking defeated enemies and slaves.⁶

The only point of agreement among proponents of the numerous theories is that a practical objective such as health had nothing to do with it. This is not surprising: before aseptic surgery, any cutting of flesh carried a high risk of bleeding, infection and death. Travelling in Iraq in the 1930s, the English doctor Wilfred Thesiger reported that Arab boys undergoing circumcision sometimes took months to recover; in the case of one who sought treatment, 'His entire penis, his scrotum and the inside of his thighs were a suppurating mess from which the skin was sloughing away, the pus trickling down his legs.'⁷ Even today, in the age of antibiotics, scores of South African teenagers die in consequence of their bush circumcision ordeal.⁸

None of the ancient cultures which practised circumcision have traditionally claimed that the ritual was introduced as a sanitary measure. African tribes, Arabs, Jews, Moslems, and Australian Aboriginals explain it different ways, but divine command, tribal identification, social role, family obligation, respect for ancestors, and promotion of self control figure prominently. Jewish authorities make no mention of hygiene, let alone sand, but place stress on the religious significance of circumcision: it is an outward sign of the Covenant between God and his people.^{9,10} The Kaguru of central Tanzania explain circumcision (practised at puberty on both boys and girls) in terms of enhancing gender differentiation and social control. They consider the uncircumcised penis unclean because its moistness makes men resemble women, whose wet and regularly bleeding genitals are considered polluting.

Initiation is also 'a cultural cosmetic' which enables the older men to impress the young with 'the need for conformity to traditional values and beliefs, and...the superior knowledge and authority of elder males.'¹¹

It was only in the late nineteenth century, when mass circumcision was being introduced for 'health' reasons, such as control of masturbation, that doctors sought legitimacy for the new procedure by attempting to explain its origin in terms of hygiene. One of the first English surgeons to make the connection was James Copland, who introduced the idea that 'the neglect of circumcision in Christian countries' was a common cause of masturbation.¹² This theme was taken up by the sanitarians in the public health movement, such as WH Corfield, who praised circumcision as:

one of the most salutary regulations that was ever imposed on a people, especially in an eastern country, where the ... necessity of scrupulous personal cleanliness is so much increased. ... What wisdom was shown by Moses, and by Mahomet in later times, in retaining this wholesome custom as a religious rite, and thereby securing its perpetuation.

It was to the observance of such practices that many nineteenth century writers on hygiene attributed 'the singular immunity of the Jewish race in the midst of fearfully fatal epidemics.'¹³ This 'immunity' was a major theme of epidemiological debate in the late nineteenth century, leading to a search for further health benefits.¹⁴

As enthusiasm grew, other medical men put forward more fanciful suggestions. Dr Dampier-Bennett believed that circumcision originated as a treatment for epilepsy: 'in all primitive peoples there is a peculiar tendency to epilepsy', he thought, which might be caused by cerebral pressure or 'local irritation' such as that generated by a tight foreskin. He had treated 'epileptiform convulsions' in a 4-year-old boy by excising his 'remarkably long and adherent' prepuce, and he considered it 'likely that, amongst wild tribes...it has been discovered that a pacifying result follows...the operation.'¹⁵

James Allen argued that circumcision came into existence as a preventive of parasitic infections such as schistosomiasis,¹⁶ while (Sir) John Bland-Sutton believed that since 'a long foreskin is a recognised hindrance to convenient coitus' the main purpose of circumcision was to ensure fertility.¹⁷

Many of the tribal cultures which practised male circumcision also enforced various forms of female genital mutilation. Western doctors today are horrified by this sort of surgery and do not seek evidence that it might be beneficial to women's health or that it originated as a means of preventing sand from getting under the clitoral hood or labia. It was a different story in the mid-nineteenth century, when many doctors assumed with WF Daniell that female circumcision as practised by savage cultures was important for medical hygiene and that further research would reveal 'the use and purport of this singular custom.'¹⁸

In the 1850s and 1860s, many English doctors believed that clitoridectomy was as valuable as male circumcision in treating nervous diseases like epilepsy, hysteria, and masturbation (as well as their sequelae in madness), and pushed the therapy on women with little attempt to gain consent.¹⁹ And many Egyptian and other Islamic physicians today insist on the hygienic value of female circumcision as a preventive of both organic disease and sexual promiscuity.²⁰

The threat of sand has also been advanced as a justification for the circumcision of normal Western men in the twentieth century. Professor Hutson stated that when Australian soldiers were stationed in the Middle East during the First and Second World Wars 'the incidence of recurrent balanitis caused by sand under the foreskin

reached 'epidemic' proportions, leading to large numbers of soldiers requiring circumcision.'¹

Spencer Beasley, one of the authors of the Royal Australasian College of Physicians (RACP) Policy Statement, similarly stated that 'the fashion for circumcision (in New Zealand) began in the Second World War in North Africa where soldiers often went days without showers and inflammation of the foreskin from sand was the most common cause of absenteeism from the front line.'²¹ With tank battles like El Alamein raging, this seems doubtful.

Circumcision in New Zealand had become widespread in the 1930s,²² following the pattern observed in Australia in the 1910s,²³ and in Britain in the 1890s, when circumcision of male infants and boys was urged as a preventive of 'congenital phimosis,' masturbation, syphilis, epilepsy, hip joint disease, bed wetting, and many minor disorders.²⁴

It is time that the 'sand myth' was laid firmly to rest. In the North African combat zone, surgical resources were limited, and already fully committed to treating the wounded and seriously ill. Surgical procedures were kept to a minimum, since dust in wounds had far more serious effects than it could have under the foreskin. This is confirmed by the official war histories. None of the many medical volumes published by Britain, Australia, and New Zealand so much as mentions 'sand' or the 'foreskin.'

The book *British History of the Second World War* identifies the main medical problems in the Middle East and North Africa as hepatitis, diarrhoea, dysentery, tonsillitis, accidental injuries, burns, malaria, sandfly fever, and 'desert sores—this might include balanitis, but no location is specified, and the condition was not treated surgically.'^{25,26}

Neither sand nor balanitis are among the 'clinical problems of war' discussed by Allan Walker in Australia's official history (although acne gets a couple of pages), and 'desert sores' turn out to be small sores arising from cuts, grazes, and insect bites which became infected with either *Staphylococcus* or *Streptococcus*.²⁷ Nor is there any reference to circumcision in the volume devoted to medical issues in the Middle East and North Africa. As among the British troops, the main health problems encountered were gastric diseases such as diarrhoea, dysentery, and hepatitis. These certainly emphasised the need for hygiene, but not specifically of the penis; it referred to the construction of latrines, correct toilet procedures, and the control of flies.

Interestingly enough, Walker remarks that 'conjunctivitis was remarkably uncommon, in spite of dust and glare and paucity of convenience for washing;' if the blowing sand was rarely able to inflame the exposed and vulnerable eyeball, it seems unlikely that it could do much to harm to the concealed and (in uncircumcised men) well-protected glans penis.²⁸ The New Zealand history similarly states that skin inflammations were a hazard of desert warfare, and that they were exacerbated by fine sand, but it makes no mention of the foreskin as a problem site, nor of circumcision as a treatment, and goes on to comment that every effort was made to minimise cuts to the skin, and to avoid surgery unless it was 'urgent or else offered the prospect of permanent relief of symptoms sufficient to enable men to be retained in useful employment overseas.'^{29,30}

Indeed, in none of the thousands of pages contained in these volumes do the words 'balanitis,' 'circumcision,' or 'foreskin' make a single appearance.

Because the sand-balanitis-circumcision claim has been based on anecdotal evidence and never substantiated, it has not been regarded as sufficiently important to warrant refutation. As a result, it maintains a furtive existence as a medical urban myth, popping up in surprising places with odd variations.³¹⁻³³ A correspondent in the *Journal of the Royal Society of Medicine* reported that 'a German surgeon' had told him that, in the Second World War, German Africa Corps troops had 'suffered in the same way', and had similarly been circumcised.³⁴

But the idea that a German under the rule of Nazism would have submitted to an operation which could have identified him as a Jew, or that anybody in authority would have recommended such a course, is hard to credit. To check this point, Mr Hugh Young wrote to Manfred Rommel, son of the German commander, who replied: 'I have never heard that soldiers in the Africa Corps were circumcised. The veterans I could contact have not either.'³⁵ Even Aaron Fink (long-time crusader for universal neonatal circumcision, and originator of the idea that circumcision was a 'natural condom,' and thus the perfect prophylactic against HIV-AIDS)³⁶ admitted that protection against desert sand was probably not the main reason for the adoption of circumcision by the Arabs and Jews.³⁷

Conclusion—There is no evidence that tribal/ritual circumcision practices arose as a hygiene measure. And 'sand under the foreskin,' balanitis, and circumcision were not significant problems during either of the World Wars.

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