

Is the human male nipple vestigial?

Jerry Bergman

The claim that the human male nipple is vestigial, or rudimentary, is shown to be erroneous. The male nipple develops as a result of sexual differentiation, and is designed to produce sexual dimorphism. The human nipple has an abundant supply of nerves and serves several important functions including as a secondary sexual trait, and also as a major stimulatory organ in both males and females. The problem of abnormal nipple development and the claims that extra nipples are atavisms also are explored.

Throughout Western history, most people have accepted the view that each animal species was specially created in much the same form in which it exists today. Most organisms were assumed to have changed very little, if at all, throughout history.¹ Although some ancient philosophers such as Lucretius taught that animal species had changed slowly as a result of various environmental influences, this theory did not receive wide support until Darwin introduced his theory of evolution by natural selection in the mid-1800s.

As a result of Darwinism, many people looked at the living world in new and sometimes radically different ways. Instead of assuming that a body structure of unknown function was simply a reflection of our ignorance about its function, as did the creationists, the evolutionists suggested that unknown function likely meant **no** function. A major reason for this interpretation was the fact that evolutionary theory motivated biologists and others to search for evidence for their new theory. When biologists found evidence that a structure appeared to be useless, they tended to label it vestigial and stopped researching the function of that structure. Fully 180 of these organs and structures (known as rudimentary or vestigial structures) were once claimed.^{2,3}

Darwin used the existence of organs that were believed to be remnants of their ancient more fully developed forms (which he called rudimentary organs) as a major evidence for his theory. If we evolved from lower forms of life, evidence of organs or structures used in the past but not in the present should be seen in our bodies. For this reason, Darwin and other evolutionists looked for examples of 'left-over organs', most of which have now been shown to be not rudimentary but quite functional.

The function of the male nipple

One of the more common structures claimed to be rudimentary was the male nipple. Darwin wrote that rudimentary organs 'are extremely common, or even general, throughout nature' and the first example he cited was 'in the mammalia, for instance, males possess rudimentary mammae'.⁴ Haeckel even claimed that the mammal milk-gland has great morphological interest because:

'This organ for feeding the young in man and the higher mammals is, as is known, found in both sexes. However, it is usually active only in the female sex, and yields the valuable "mother's milk"; in the male sex it is small and inactive, a real rudimentary organ of no physiological interest.'⁵

A modern example of the results of the same kinds of assumptions that caused the male nipples to be labelled useless is as follows:

'... when we inspect *Homo sapiens*, alleged to be Nature's most illustrious accomplishment, it is obvious that the job could have been done much better! As an example, let us consider the male breast, a structure encountered in all mammals. What did Nature have in mind for this decorative appendage? Was it supposed to serve a real purpose, or was it a whimsical act committed during a moment when Nature was in a joking mood?'⁶

The fact that male nipples are not used for breast feeding is a common reason behind the erroneous conclusion that they are useless. The male nipples have several important functions, but they are primarily involved in sexual stimulation.^{7,8} Both the male and female nipples contain an abundantly large supply of nervous tissue, and therefore are very sensitive to touch.⁹⁻¹⁴ The male nipple is equally as sensitive as the female nipple.¹⁵ Sykes observes, '... the nipple is innervated principally by the anterior and lateral cutaneous branches of the fourth intercostal nerve. It also receives contributions from the corresponding branches of the third and fifth intercostal nerves'.¹¹ The presence of an abundance of nervous tissue is a major clue that an organ has a function. Although several differences in the male and female mammary nipple-areola complex exist, both male and female nipples can be stimulated by touch.¹⁵⁻¹⁷ One major difference is that women have more and larger nipple erogenous zones, and they are as a whole more important to their sexual response.¹⁸

Another major difference is that the male nipple area nerves are closer together compared with the female, resulting in the fact that their sexual stimuli function must be much more focused and discrete. The importance of the male nipple also is indicated by efforts to reconstruct the male nipple-areolar complex after an accident or disease.¹⁹⁻²³

According to Stoppard, it is only in humans that breasts and nipples are involved in sexual activity, and there is no evidence for the evolution of this important response [designed for use within monogamous heterosexual marriage—Ed.] from lower primates.²⁴

Male nipple development

Physical sexual differences between males and females are the result of development due to chromosomal and hormonal influences. In what is known as the biphasic model, one nonsexual zygote begins and the genetic differences that produce the sexual differences exert their effect as development proceeds. Males and females are physiologically identical in the early stages of embryological development.²⁵ Men have nipples because they have already started to develop at the time when the male hormonal signal to differentiate is activated.²⁶ Male nipple development is therefore a result of sexual differentiation designed to produce sexual dimorphism. The nipples are obviously part of the design of the male body.

At times, however, this development can go wrong. As Haeckel noted almost a century ago, abnormal development can cause the breast to be ‘as fully developed in man as in woman, and it may give milk for feeding the young’.²⁷ Many other examples of sexual dimorphism exist in which remnants of the undifferentiated state still exist, including the Wolffian and Müllerian ducts.

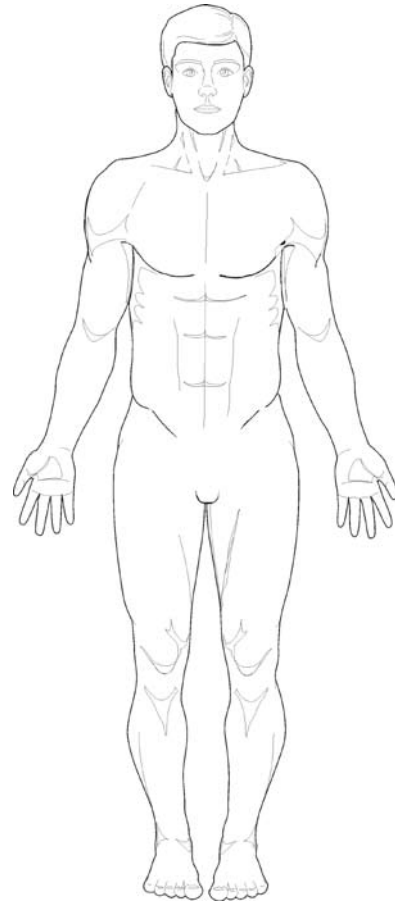
Sexual differentiation is complex, and Hines notes that research into psychological sexual differentiation has produced surprising findings that sometimes contradict prevailing assumptions.²⁸ For instance, although we think of sex differences as being determined by the sex chromosomes (XX or XY), the role of gonadal hormones also is critical. Also, although hormones produced by the male gonads are essential for masculine development, hormones produced by the female gonads ‘have relatively little influence on feminine psychological development’. Even more remarkably, a major ‘female’ hormone, estrogen, can have powerful masculinizing influences during development.²⁸

This information is ironic in view of how often questions about the function of male nipples are asked. Gould claimed that in his experience with the public ‘no single item has evoked more puzzlement than the very issue that Erasmus Darwin chose as a primary challenge to his concept of pervasive utility—male nipples’.²⁹

Male nipples as atavisms

One of Charles Darwin’s central lines of evidence for his theory was the existence of **atavisms**, the reactivation of long-silent genes that cause the reappearance of a long lost ancestral physical or behavioural trait not displayed in recent ancestors.³⁰⁻³² As a biological idea, atavism meant that some individuals reverted in certain ways both physically and mentally to an earlier ‘evolutionary’ type. Ironically, in some cases the male nipples were also incorrectly claimed to be atavistic organs.

Traits such as supernumerary (extra) nipples, toes and fingers all were viewed as physical evidence of human atavism.³³ The evolutionary cause of this physical degen-



The so-called ‘mammary line’ that exists in humans often forms a vase-shaped single line. Its top extends from the armpits and narrows as it passes through the normal nipple area, the thinnest part being on the abdomen and extending down to the groin and into the legs.

eration was never explained satisfactorily.

Abnormal development

The claim, in regard to nipple atavism, usually suggests that the positions of mammary gland structures in humans resemble those that occasionally occur in lower mammals. Supernumerary or accessory nipples (*polythelia*) and supernumerary breasts (*polymastia*) are among the more common developmental anomalies of the breast.³⁴ Their frequency amounts to about 1% of all births in both human males and females.^{34,35} This anomaly was once an important line of evidence for evolution because the accessory nipples were believed to ‘substantiate the theory that humans have descended from lower forms of animal life’,³⁶ and was cited by evolutionists as evidence of a human relationship to ‘lower’ mammals because many lower mammals have from six to ten pairs of nipples.³⁷

During the sixth week of human embryonic development, a thickening in the skin called the *mammary ridge*, or milk line, first appears. It develops in the thoracic region and becomes breasts in females and nipples in both males and females. The so-called ‘mammary line’ that exists

Photo by Kathy Young



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in humans often forms a vase-shaped single line. Its top extends from the armpits and narrows as it passes through the normal nipple area, the thinnest part being on the abdomen and extending down to the groin and into the legs.³⁸ To be a true atavism, a supernumerary breast in humans would have to occur only along the mammary lateral line as it does in lower mammals (the mammary line extends bilaterally from the auxiliary region to the inguinal (groin) ligaments). As development proceeds, the mammary line dies back, usually leaving two breast buds in both males and females.

This arrangement is essential, but is not sufficient to claim that supernumerary nipples are a throwback to a time when human females supposedly had a set of teats similar to those on female dogs. In many cases, supernumerary nipples do not develop according to this pattern, and in the vast majority of cases the number of added nipples (which often lack breast tissue) amounts to only one.³⁹ Allford noted that she never has seen more than one extra pair of rudimentary nipples during her entire medical practice.³⁷

These rudimentary nipples in humans often occur in or near the armpits (as is normal in some kinds of bats) or in the inguinal region (as is normal in some whales), but they also can occur almost anywhere on the body—even in locations where mammals do not have mammary glands such as on the back, arms, neck, legs, shoulder and buttocks.³⁹⁻⁴¹ During puberty, the accessory nipple may enlarge somewhat. Sometimes, there is breast tissue beneath the accessory nipple but, more often, true breast tissue is lacking.⁴² This condition is classified medically as a genetic or developmental deformity and is consistently treated as such by the medical establishment.³⁶ Evidence for this

view includes the finding that the condition may be sporadic, familial, or associated with other deformities such as nephroureteric⁴³ malformations/abnormalities, and pyloric stenosis.⁴⁴

Conclusions

A review of the medical literature has shown the claim that the male nipple is vestigial or atavistic to be false. This is one of many examples used by Darwinists to argue for evolutionism that scientific research has now shown to be false. This example is also one of many that shows how Darwinistic assumptions have mislead science, and have resulted in incorrect conclusions. In other cases, such as eugenics, the results have been tragic. In the case of male nipples, the conclusions by evolutionists were only a small part of the 'evidence' which they used to produce their case in favor of a world view that has had major negative repercussions on society and the lives of many people.

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43. Nephrouinary refers to diseases that effect both the kidney and urinary systems as a unit.
44. Pyloric stenosis is a narrowing of the diameter of the pyloric orifice, the area of the opening at the posterior of the stomach.

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Haeckel’s scientific religion

Haeckel, however, was not simply a biologist in the sense that we would use that word today. For he saw himself—and was seen by many German intellectuals and artists in the latter part of the nineteenth century and the early part of the twentieth century—as the founder of a new *scientific religion*. He called his philosophy *monism* and saw himself as the leader of a movement of aggressive rationalism which would eventually rid Germany of the last traces of superstitious religion and replace Christianity with a *religion* which glorified modern science.

Richard Webster
*Why Freud was Wrong:
Sin, Science and Psychoanalysis*
Basic Books, p. 229–230, 1996.