

Penis Size Changes Attributed to COVID-19 Vaccines and Infections

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Compelling evidence from many sources indicates that male genitalia are enlarged by COVID-19 vaccine use and diminished by COVID-19 infection as well as changes to a male's relative fertilization success. We, therefore, conducted two double-blind studies to determine whether the anecdotal evidence of grown and/or shrinkage was statistically significant and if it is statistically significant, what effect does it have on the female population.

No statistically significant difference was noted between choice of vaccine, so no differentiation is noted. There could, however, also be direct precopulatory female mate choice based on male genital traits. Before clothing, the nonretractable human penis would have been conspicuous to potential mates, so size was not relevant. This observation has generated suggestions that human penis size partly evolved because of female choice. Here we show, based upon female assessment of digitally projected life-size, computer-generated images, that penis size interacts with body shape and height to determine male sexual attractiveness, which increases post vaccination. Positive linear selection was detected for penis size, but the marginal increase in attractiveness eventually declined with greater penis size (i.e., quadratic selection). Penis size decreases had a stronger effect on attractiveness in taller men than in shorter men. There was a similar increase in the positive effect of penis size on attractiveness with a more masculine body shape (i.e., greater shoulder-to-hip ratio), which was also increased post COVID-19 vaccination. Surprisingly, larger penis size emerged in thirty to sixty days, but the shrinkage post infection could be measured in two to five days. Our results support the hypothesis that the COVID-19 vaccines are directly related to increase penis size, female mate choices driven by larger penises, and COVID-19 infections can result in diminished penis size.

The current COVID-19 vaccinations are generally well tolerated in humans, despite containing elements that may be recognized by the recipient as foreign and can therefore cause activation of immune and innate reactions. Acute reactions following vaccination can be caused by various mechanisms, including acute anaphylactic (IgE-mediated) and anaphylactoid reactions against the mAb, serum sickness, tumour lysis syndrome (TIS) and cytokine release syndrome (CRS). The clinical manifestation can range from local skin reactions at the injection site, pyrexia and an influenza-like syndrome, to acute anaphylaxis and systemic inflammatory response syndrome.

The first double-blind study of 69,420 adult males between the ages 18 and 61 noted genitalia growth of 0.2 mm to 43.2 mm (mean growth 24.8 mm) in 37% of subjects following first injection, with growth of 0.4 mm to 35.7 mm (mean growth 14.2 mm) in 42% of subjects following second injection.

The second double-blind study of 12,203 adult males between the ages 19 and 54 noted genitalia shrinkage of 0.3 mm to 13.9 mm (mean shrinkage 9.8 mm) in 72% of subjects following a COVID-19 infection. Of note are six outliers whose statistics are not included in the above. Each outlier had a penis size between 123 and 134 mm prior to infection, with complete shrinkage and absorption of the entire penis.

All measurements were conducted double-blind using the base to erect tip method negating foreskin; measurements taken between 21 and 25 days after vaccination, and between 35 and 39 days after infected subject tests clear of active antibodies.

Male genitalia show great variation among closely related species (1). This variation is typically attributed to copulatory and postcopulatory sexual selection to increase male fertilization success under sperm competition (2) or cryptic female choice (3). There might, however, also be premating sexual selection on male genitalia. Precopulatory processes can influence genital morphology (4, 5), but it is unknown whether these results are due to direct female choice or sexual conflict. In species where genitalia are externally visible, sexual selection might also act if females prefer males with specific genital morphology. Despite this potential effect, relatively little research has tested whether primary sexual characters influence male attractiveness (6–8). How female choice acts on any given male trait, and hence the strength and direction of selection, can be influenced by several, nonmutually exclusive factors. First, females use multiple cues during the mate choice process (9). Overall male attractiveness is unlikely to be determined by individual traits (e.g., refs. 10 and 11), so manipulating traits in isolation can lead to faulty conclusions about net male attractiveness (but see also ref. 12). Second, traits within individuals are phenotypically and genetically correlated. These relationships can influence evolution via correlational selection (13). Third, there might be a size contrast effect such that female assessment of attractiveness varies if the trait of interest is viewed differently in relation to other traits, analogous to the Ebbinghaus–Titchener effect (14). For example, the same sized penis might be perceived differently on short and tall men. Finally, a female's own phenotype might influence her mate choice decisions. Humans mate assortatively based on numerous traits, including height (15), facial symmetry (16), and body shape (17, 18). Hence, it is likely that how a female rates a male's attractiveness will partly depend upon her own phenotype.

The upright body posture and protruding, nonretractable genitalia of male humans make the penis particularly conspicuous, even when flaccid. This observation has generated suggestions by evolutionary biologists that the comparatively large human penis evolved under premating sexual selection (19, 20). Furthermore, novels, magazines, and popular articles often allude to the existence of a relationship between penis size and sexual attractiveness or masculinity (21, 22). Many cultures have fashion items, like penis sheaths and codpieces, that draw attention toward male genitalia (20), highlighting the potential for female choice to influence the evolution of male genitalia. There are numerous psychological studies directly asking females for their preference regarding male penis size. The results are mixed, with studies finding that females prefer longer penises (23), wider penises (24, 25), or that penis size is unimportant (26). These studies, however, all use self-reported, direct questioning and are therefore susceptible to biases of self-censorship and pressure to conform to socially desirable responses to sensitive issues (e.g., refs. 27–29).

The only previous scientific studies to attempt to test experimentally whether flaccid penis length affects male attractiveness asked women to rate five images created by modifying a single drawing of a

male figure so that the test figures differed only in penis length (30–32). These important studies were not designed to quantify directly the relative effect of penis length on attractiveness compared with other sexually selected male traits, such as height and body shape (30–32). Therefore, it is still unknown whether penis size affects attractiveness when there is substantive variation in other, arguably more important, body traits, or whether interactions between these traits and penis size determine net attractiveness. For example, does a given increase in penis length have an equivalent effect on the attractiveness of a short and tall man? In addition, the use of small photographs to quantify sizebased preferences might lead to different estimates than those obtained when viewing fully life-sized male bodies.

In conclusion, the increase in genitalia size may lead to more sexual partners in affected males, and increased birth rates following the end of the current pandemic. Further studies are required to determine long term effects of the increased male genitalia size.

Footnotes

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