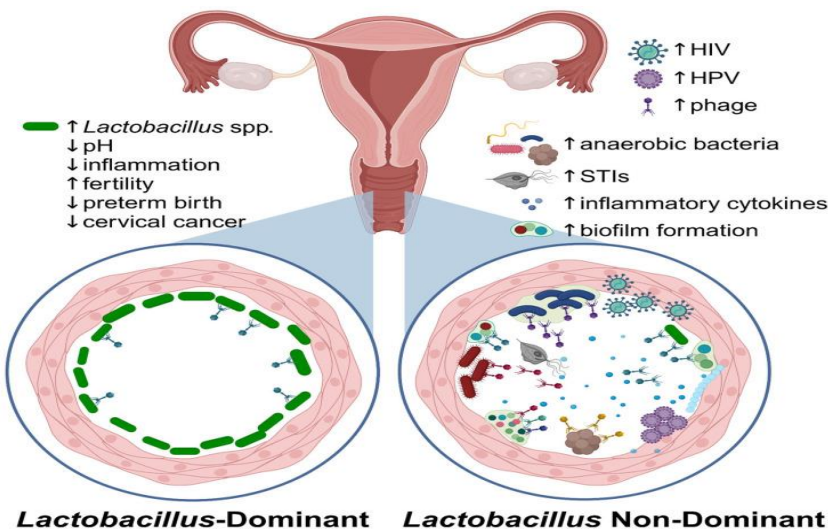


Antibiotics and the Vaginal Virome: A Hidden Link to Reproductive Health?

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Context

- Traditionally, research on the vaginal microbiome has focused on bacterial communities.
- Emerging evidence suggests that viruses, including eukaryotic viruses and bacteriophages, also play a crucial role in vaginal health and disease.



Impact of Antibiotics

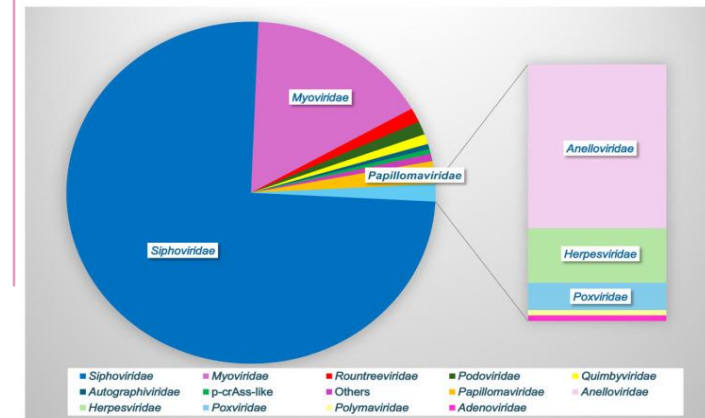
- The use of antibiotics, such as azithromycin, can alter the composition of the vaginal virome.
- Studies on women undergoing in vitro fertilization (IVF) have shown that prophylactic exposure to azithromycin is associated with increased diversity of herpesviruses and alphapapillomaviruses.
- Greater viral diversity has been observed in women whose embryo transfers did not result in clinical pregnancy, suggesting a possible link between the virome and pregnancy success.

Viroma Diversity	Pregnancy Outcome
High Diversity	Lower success rate
Low Diversity	Higher success rate

Conclusion

The vaginal virome may represent a key element in understanding the interaction between the genital microbiota, mucosal immunity, and reproductive outcomes.

Further studies are needed to explore the role of the virome in reproductive health and to develop targeted therapeutic strategies.



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