

# Vulvovaginitis before puberty

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## Introduction

Vaginal discharge in girls before puberty is a clinical challenge. The complaint is often caused by bacterial or non-specific vulvovaginitis.

According to the literature Group A streptococci (GAS) and *Haemophilus influenzae* are the most common species in bacterial vulvovaginitis in prepubertal girls.

We here report the microbiological findings, from the Department of Clinical Microbiology, which seems related to vulvovaginitis.

## Materials and methods

- Retrospectively we have drawn 495 samples from the database of Department of Clinical Microbiology, Viborg (MADS). MADS contains all the microbiological answers from the coverage area of 230.000 citizens.

- Samples from girls, less than 10 years old, in the 10 years period between 2001-2011, were collected.

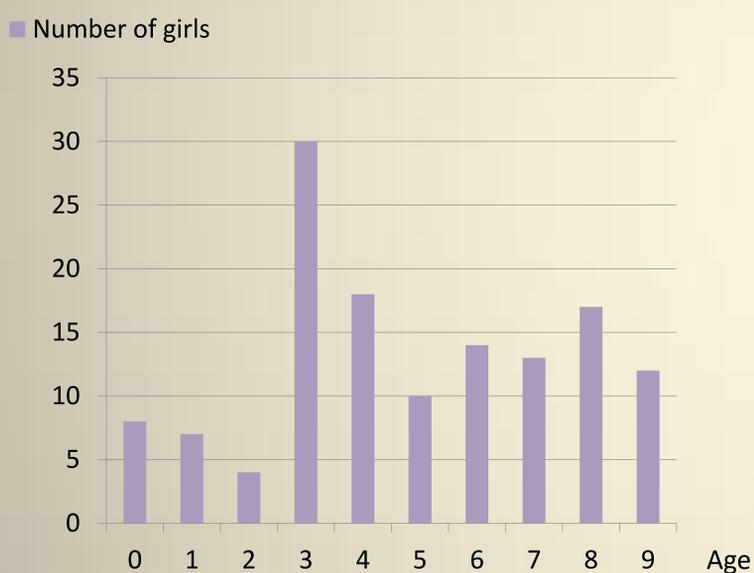
- The criteria's for the search in the database were samples from vagina and vulva.

- The total amount of samples was 495 of which 133 showed significant bacterial growth.

- Most of the samples were taken by general practitioners and a few in the department of pediatrics.

## Results

### Age of 133 girls with significant bacterial growth

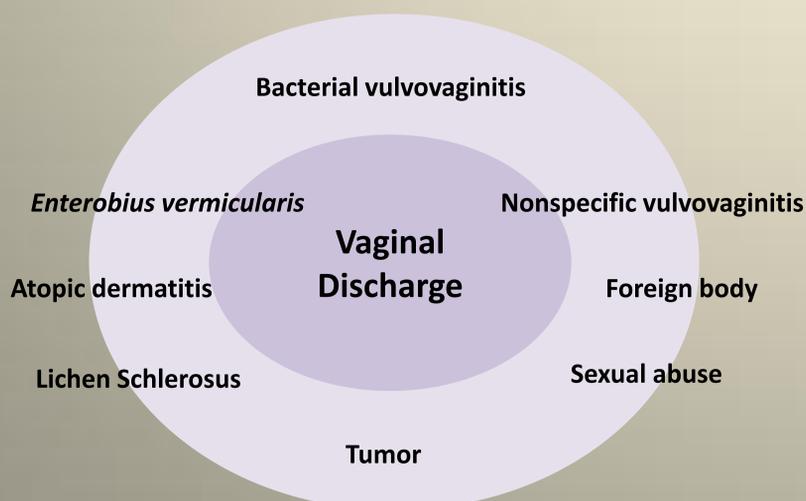


### Microbiological findings in the 133 samples

Group A Streptococci	45 %
<i>Staphylococcus aureus</i>	13 %
<i>Haemophilus influenzae</i>	11 %
Group G Streptococci	9 %
Candida	9 %
Group B Streptococci	8 %
More than one bacteria	5 %
Total	100 %

## Differential diagnosis

The most important differential diagnosis to bacterial vulvovaginitis are shown here.



## Conclusion

It is obvious that vaginal discharge is a common problem in girls before puberty.

The true prevalence is most likely greater than shown here. Probably samples aren't taken from every girl with vaginal discharge. Only a minor part of the girls, with clinical signs of vulvovaginitis, was shown to have significant bacterial growth. GAS are the most common, along with *H. Influenzae* and *S. Aureus*.

Studies of bacterial vulvovaginitis reveals, that girls with findings of GAS or *H. influenzae* should be treated according to antibiotic susceptibility.

Information about the normal vaginal flora in girls before puberty is almost non-existent.

If a sample show growth of potential pathogen it is a clinical judgment to decide if antibiotic treatment is required.

## References

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