

MICROBIAL CONTAMINATION ON TRANSVAGINAL ULTRASOUND PROBES IN A GINECO-OBSTETRICS DEPARTMENT OF A TERTIARY HOSPITAL IN SPAIN P407

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Introduction

Transvaginal ultrasound probes are semicritical devices routinely used with disposable protective covers.

These covers can suffer ruptures (between 1-9% as described in literature) that facilitate probe contamination with pathogenic microorganisms present in the vagina.

Transmission to other patients can occur if disinfection of probes is not done properly after each use.

Objectives

The main objective of this study is to determine the prevalence of microbial contamination of transvaginal ultrasound probes in our hospital.

Methods

Cross-sectional study. Swap samples were taken from transvaginal ultrasound probes available for use in the exploration units, theoretically after standard chemical disinfection at point of use. Investigation of any bacteria and fungi growing was done by culture and detection of Human papillomavirus, *Chlamydia trachomatis* and *Neisseria gonorrhoeae* by molecular techniques.

Results

A total of 51 samples were taken from 17 transvaginal ultrasound probes. The prevalence of contamination was 70.59% (36/51).

64.71% of the samples contained skin and environmental flora (*Coagulase-Negative Staphylococcus*, *Bacillus spp*, *S. epidermidis*). In 19.61% of the samples non-fermenting Gram-negative bacteria grew and in 5.88% of them methicillin-sensitive *Staphylococcus aureus* was detected (figure 1).

Two samples were positive to human papillomavirus for 3 different genotypes (6, 52, 58).

None of the samples were positive for fungi, *Chlamydia trachomatis* or *Neisseria gonorrhoeae*.

Conclusions

Skin and environmental flora are frequently isolated in transvaginal ultrasound probes. Human papillomavirus contamination is significant in transvaginal ultrasound probes as described by other authors.

As there is a risk of transmitting infections via transvaginal procedures, transvaginal ultrasound probes must be properly disinfected between patients, using high-level disinfectants.

Healthcare workers must be educated about the risks associated with this procedure and the importance of the proper disinfection technique (figure 2).

Figure 1. Isolated microorganisms in transvaginal ultrasound probes

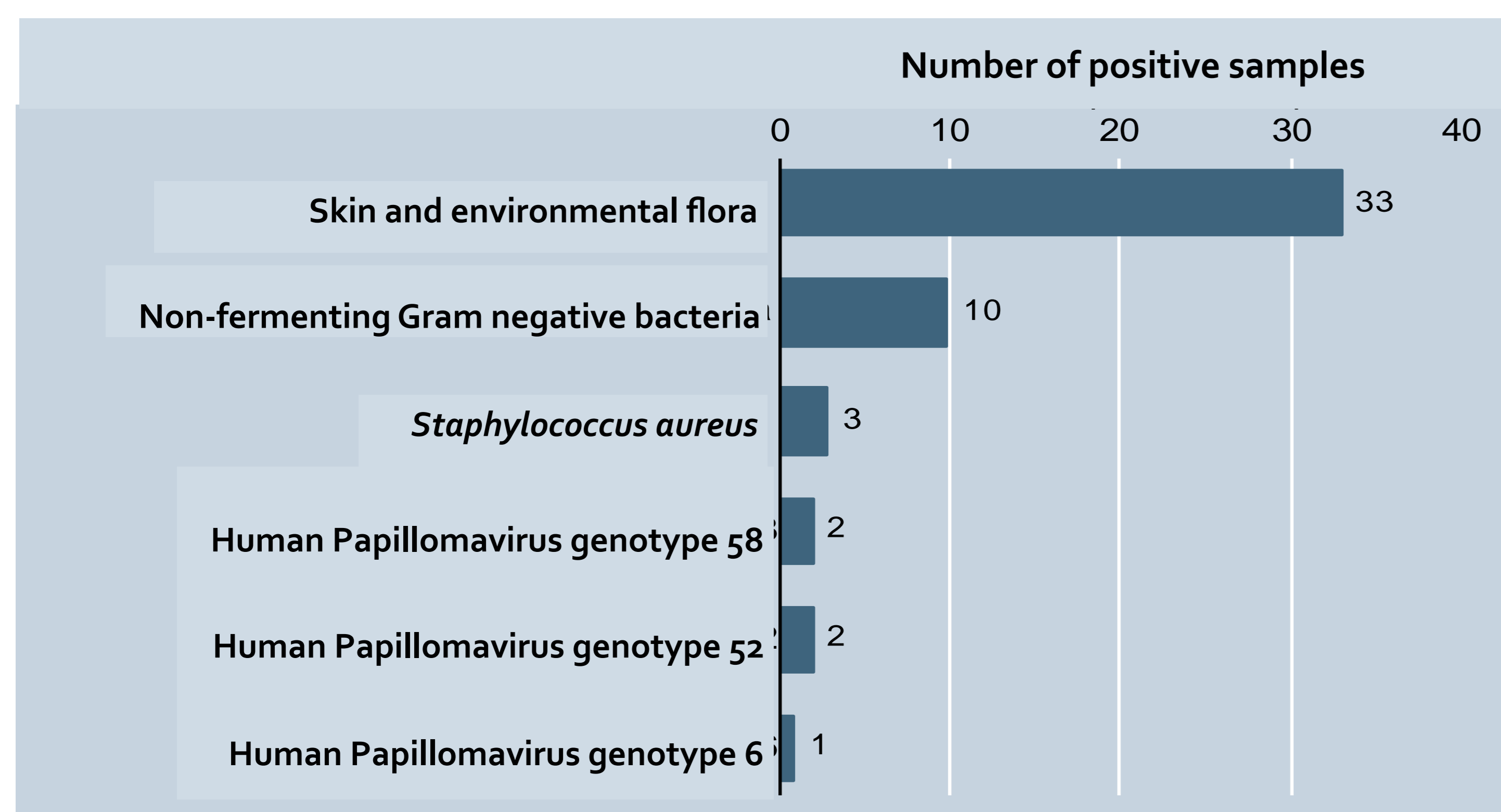


Figure 2. Transvaginal ultrasound probes disinfection technique



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