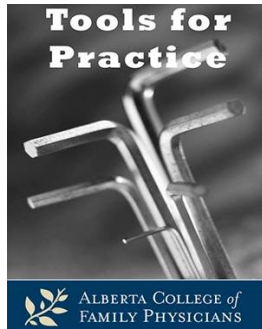


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March 26, 2018



Vaginal Self Swabs – Simple and Sensitive for STIs

Clinical Question: What is the most sensitive way to test for chlamydia and gonorrhea?

Bottom Line: Self-collected vaginal swabs (SCVS) appear more sensitive in diagnosing chlamydia and gonorrhea than health professional collected endocervical swabs and first catch urine (FCU). Endocervical swabs and FCU testing may miss up to 10% of STIs in women. SCVS (when pelvic exam not required) is recommended in women and FCU in men.

Evidence:

- SCVS versus endocervical swab:
 - 3,973 women (with and without symptoms) in sexual health centre had SCVS followed by physician endocervical swab:¹
 - SCVS statistically significantly increased sensitivity: 97% versus 88%.
 - Endocervical swab missed 1 in 11 cases of chlamydia.
 - SCVS and endocervical swabs had similar sensitivities (99% and 96%) for gonorrhea.²
- SCVS versus FCU and/or endocervical swab:
 - 1,464 symptomatic and asymptomatic women at primary/secondary care clinics, all collected SCVS, physician vaginal, or endocervical swabs and FCU.³
 - Physician and SCVS: Similar sensitivity (>95%) for gonorrhea and chlamydia.
 - SCVS versus FCU: SCVS identified statistically significantly more patients with chlamydia (196 versus 171).
 - 318 women (172 with chlamydia):⁴
 - FCU had statistically significant lower sensitivity (88%) compared to endocervical and SCVS (~97%).
 - 1,654 men and women (164 with chlamydia):⁵
 - Endocervical swab statistically significantly more sensitive (99%) than FCU (85%).
 - SCVS (95%) not different than either.
 - In men, no significant difference between urethral swab or FCU.

- Systematic review (21 studies) reported no difference in sensitivity of FCU (87%) versus SCVS (92%).⁶
 - Limitations: Compared to endocervical specimens, which are not 100% sensitive.⁶

Context:

- No gold standard for chlamydia and gonorrhoea detection, limiting evaluation of new diagnostic tests.⁷
- Combination swab specificities in above studies were consistently 99-100%.¹⁻³
- Patients find SCVS “easy” to perform (88%) and prefer home completion.⁸
- Patients randomized to home testing (swabs mailed to their home) are twice as likely to complete the test (~60% versus 30%).^{9,10}
- Nucleic acid amplification test swab is recommended. Specimens can be stored at room temperature and must be processed <60 days of collection.
- Guidelines recommend:¹¹
 - SCVS when a pelvic exam is not otherwise indicated.
 - FCU for men.

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Disclosure:

Authors do not have any conflicts of interest to declare.

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