Self-Obtained Vaginal Swabs to Screen for Sexually Transmitted Infections

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QUESTION

›Are Self-Swabs as Effective for Screening for Vaginal STIs as Swabs Collected During a Speculum Exam?
Incidence of sexually transmitted infections (STIs) continues to increase

- Chlamydia: incidence of 478.8 cases/100,000 people
  - Most common reported bacterial infection in the US
- Gonorrhea: incidence of 124 cases/100,000 people

Both chlamydia and gonorrhea are the 2 most common identified causes of pelvic inflammatory disorder

Both of these infections can be diagnosed by a physician-obtained endo-cervical swab during a speculum exam

- Can also be diagnosed via a urine specimen or urethral, rectal, or pharyngeal swabs

Barriers to diagnosis: access, cost, avoidance of pelvic exam

2015 Meta-Analysis with 21 composite studies

- 4 cross-sectional studies directly compared self-obtained vaginal swabs

Sample size: 994 female adolescents/adults
  - Some were symptomatic and some were not
Gonorrhea Studies

› 2015 Meta-Analysis with 21 composite studies
› 1 cross-sectional study directly compared self-obtained vaginal swabs
› Sample size: 309 female adolescents/adults
  - Most were symptomatic

This is how to take your own swab for a SOLVS PCR test

Put the tip of the cotton swab stick about 2 cm (length of one finger joint) inside your vagina. Turn the swab around once.

Count to ten whilst leaving the cotton swab stick in the vagina.
### Study Participants Sensitivity Specificity

<table>
<thead>
<tr>
<th>Study</th>
<th>Participants</th>
<th>Sensitivity</th>
<th>Specificity</th>
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</thead>
<tbody>
<tr>
<td>Berwald 2009</td>
<td>162</td>
<td>0.91</td>
<td>0.99</td>
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<tr>
<td>Domeika 1999</td>
<td>283</td>
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<td>Hook 1997</td>
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<td>Skidmore 2008</td>
<td>240</td>
<td>1.00</td>
<td>1.00</td>
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</table>

Sensitivity: Correctly identifying pts w/ the STI

Specificity: Correctly identifying pts as not having the STI
Conclusion

› Self-obtained vaginal swabs have been found to be equivalent to clinician-collected cervical specimens in the diagnosis of *Chlamydia trachomatis* and *Neisseria gonorrhoea* (SOR: A, based on a meta-analysis).

› The CDC actually has now stated that vaginal swabs are actually the preferred method of diagnosis in women

Discussion

› Since the CDC prefers SOVs, should physicians obtain their samples from the vagina as opposed to the cervix?
› Should SOVs be used in a clinical setting such as for women resistant to having a pelvic exam?
› Can self-obtained vaginal swabs be useful in rural and international settings?
References

- Garrow S, et al. The diagnosis of chlamydia, gonorrhea, and trichomonas infections by self obtained low vaginal swabs, in remote Northern Australian clinical practice. *Sexually Transmitted Infections*. 2002: 78 (0) 278-281