

Trichomonas Vaginalis: whom should we screen?

Presented by

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Presenter Disclosures

Sylvia Tan

The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

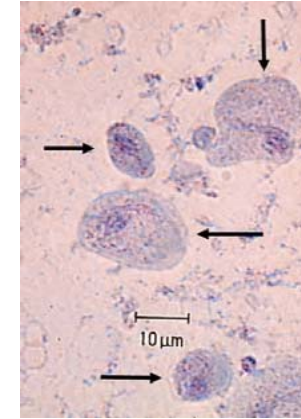
Employment

What is *T. vaginalis*?

- The most common curable sexually transmitted infection (STI)
- 7.4 million new cases annually in the United States
- Affects both women and men
- More common in women

What is *T. vaginalis* ?

- Caused by a single-celled protozoan parasite
- Often asymptomatic
- Easily cured by a single dose of antibiotics



What is *T. vaginalis* ?

- Untreated infection is associated with:
 - Pelvic inflammatory disease
 - Low birth weight
 - Preterm delivery
 - Increased susceptibility to HIV

T. vaginalis: surveillance

- Screening is an effective strategy for the prevention of long-term health effects, since trichomoniasis is often asymptomatic.

T. vaginalis: surveillance

- 3.1% of U.S. women between 14-49 infected [NHANES 2001-2004]
- 2.3% of U.S. adolescents between 18-26 infected [National Longitudinal Study of Adolescent Health (Add Health), 2001-2002]

T. vaginalis: surveillance

- Both surveys report higher rates of infection among African-American females:
 - 13.3%, NHANES
 - 10.5%, Add Health



Despite these high rates, there is no active surveillance of Trichomoniasis in the United States.

Monitoring STIs Survey Program (MSSP)

- The **Monitoring STIs Survey Program (MSSP)** is designed to provide continuous monitoring of trends in three sexually transmitted infections in a single urban community (Baltimore), over a three-year period:
 - Gonorrhea
 - Chlamydia
 - Trichomoniasis

Monitoring STIs Survey Program (MSSP)

- English-speaking males and females between 15-35 years, residing in Baltimore households with landline telephones
- Interviews conducted using private telephone audio computer-assisted self-interviewing (T-ACASI) techniques
- Specimen collection kits sent and returned via U.S. mail



Monitoring STIs Survey Program (MSSP)

- *T.vaginalis* is detected by transcription-mediated amplification (TMA) using analyte-specific reagents (ASR).
- *T. vaginalis* infection (trichomoniasis) is defined as a repeatedly positive test result.

Monitoring STIs Survey Program (MSSP)

- Characteristics of respondents providing specimens
- Estimates of trichomoniasis prevalence
- Associations between trichomoniasis and demographic or behavioral characteristics

MSSP – Year 1 Results

- In Year 1 the study (2006-2007), 1248 respondents completed the T-ACASI interview.
- 866 (69%) mailed in specimens to the laboratory in time for the current analysis.
- the impact of specimen non-response is likely ignorable.

MSSP – Year 1 Results

	<i>T. vaginalis</i> prevalence	PR	95% CI	P-value
Overall	6.2%	<i>n/a</i>		
Female	10.1%	5.1	(2.0, 13.0)	0.001
Male	2.0%	<i>Ref</i>		
Black	9.3%	6.1	(2.2, 16.9)	<0.001
Non-Black	1.5%	<i>Ref</i>		
< HS	8.5%	2.8	(1.4, 5.8)	<0.01
High school	9.2%	3.1	(1.5, 6.4)	<0.01
> HS	3.0%	<i>Ref</i>		

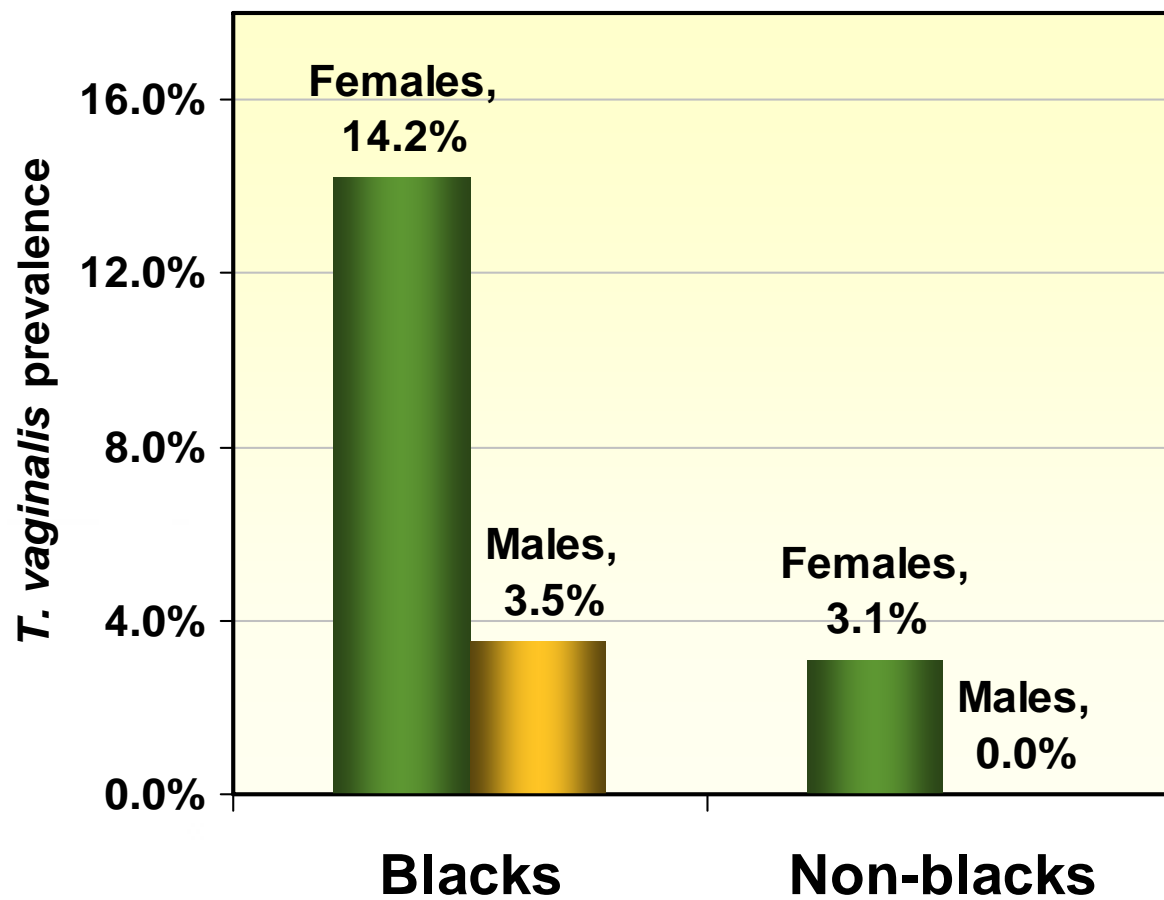


The majority (76%) of confirmed infections were asymptomatic, with no reported discharge or dysuria in the past three months.

MSSP – Year 1 Results

- Among Black females, the prevalence of trichomoniasis rises to 14.2%

MSSP – Year 1 Results



MSSP – Year 1 Results

■ Health behaviors associated with Trichomoniasis:

● Previous STI

(PR 3.4, 95% CI [1.9, 6.1])

● Previous Trichomoniasis

(PR 4.3, 95% CI [2.3, 7.9])

● Current Chlamydia

(PR 2.9, 95% CI [1.3, 6.8])

MSSP – Year 1 Results

- Sexual behaviors associated with Trichomoniasis:
 - 2 or more partners in the past year
(PR 3.3; 95% CI [1.8, 6.1])
 - New partner in the past 3 months
(PR 2.1; 95% CI [1.1, 3.8])
 - Don't know if partner had an STI in the past year (PR 2.5; 95% CI [1.2, 5.3])
 - Ever forced to have sex
(PR 2.9; 95% CI [1.6, 5.3])

MSSP – Year 1 Conclusions

- *T. Vaginalis*:
whom should we screen?

MSSP – Year 1 Conclusions

- With or without symptoms
- Women
- African-Americans
- Prior history of STIs
- History of risky sexual behavior
(multiple partners, don't know if partner has STI, forced sex)

Thank you!

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 - the University of North Carolina -- Chapel Hill
 - Johns Hopkins University.

Thank you!

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