

STDs

Wednesday, October 15, 2014
4:11 PM

Risk factors for STDs:

- protection
- teens, elderly, minorities
- IMV
- prostitution
- drugs
- women

Overview:

Gonorrhoea	B	(reported)	Urethra (m), Endocervical (f)
Chlamydia	F	(reported)	Urethra (m), Endocervical (f)
Syphilis	B	(reported)	Genitals, perianal, mouth, throat, palms
Herpes	V		Genitals
Trichomoniasis	F		Urethra (m), Endocervical (f)

- CHACRE** - painless / genital, perianal, mouth, throat/ 1-2 weeks
- QUINRA** - rubbery, necrotic, destructive lesions anywhere (skin, bone, soft tissue, liver)
- PROCTITIS** - itching, burning, tingling @ site of future lesion
- LYMPHADENOPATHY** - enlarged lymph nodes
- DYSPARUNIA** - painful intercourse

- B - Bacterial
- V - Viral
- F - Fungal
- P - Parasitic

Symptoms & Signs:

	Symptoms/Signs	Complications	Diagnosis	Microbio	Pathophys	
Gonorrhoea	<ul style="list-style-type: none"> M: dysuria, frequency, pus F: pain, bleeding discharge, pus F: sore throat 	<ul style="list-style-type: none"> M: discharge, bleeding (asympt-mild) F: dysuria, frequency, pus F: pain, pus F: sore throat 	<ul style="list-style-type: none"> -Epididymitis (RARE) -Proctitis (RARE) -Inguinal lymphadenopathy (RARE) -Urethral stricture (RARE) <p>(Disseminated Gonorrhoea) (women 5%)</p>	<ul style="list-style-type: none"> -Gram stain (males only) -culture, NA Hybridization -NAATs 	<ul style="list-style-type: none"> Neisseria gonorrhoeae - Gram diplococcus - mucous membranes 	<ol style="list-style-type: none"> 1) mucosal gill 2) submucosal tissue 3) sloughing (damage) 4) PMN 5) abscess (pus)
Chlamydia	<ul style="list-style-type: none"> M: pus, discharge, pus (>50% asym) F: pain, bleeding discharge, pus (>50% asym) F: sore throat 	<ul style="list-style-type: none"> M: discharge, bleeding (>50% asym) F: pus (dysuria, frequency uncommon) F: pus F: sore throat 	<ul style="list-style-type: none"> -Epididymitis - PID - neonatal (Reiter's Syndrome) 	<ul style="list-style-type: none"> -culture (not widely used) -NAATs 	<ul style="list-style-type: none"> Chlamydia trachomatis - obligate intracellular parasite - mix between virus/bacteria - maintains cellular identity - no cell wall 	<ol style="list-style-type: none"> 1) EBs enter cell 2) EBs form 3) EBs multiply 4) EBs → EBs 5) cell bursts & releases EBs 6) REPEAT
Syphilis	<p>Primary: chancre/contagious/ lymph node</p> <p>Secondary: rash, palmar lesions, ulcers, malaise, nausea / lymph nodes</p> <p>Latent: positive, but asympt (EARLY < 1yr, LATE > 1yr, unknown)</p> <p>Neuro: CNS, any stage, → meningitis, paralysis, dementia, deaf, blind</p> <p>Tertiary: gumma & cardio</p> <p>Congenital: crosses placenta, seen later</p>			<ul style="list-style-type: none"> -microscope -testing (nontreponemal) 	<ul style="list-style-type: none"> Treponema pallidum - spirochete 	<ol style="list-style-type: none"> 1) contact via mucosa/lesion 2) enters blood through break in epithelium
Herpes	<p>1st: PRIMARY - NO Ags to HSV 1/2</p> <p>NONPRIMARY: Ags to HSV 1/2 (lesion eruption, itch/pain, fever, discharge, reactivation), skin shedding</p> <p>2nd: RECURRENT - prodrome, mild symptoms, skin shedding</p>		<ul style="list-style-type: none"> -lesions (non-genital) - CNS 	<ul style="list-style-type: none"> -culture -PCR -Ab Tests (HSV 1/2) 	<ul style="list-style-type: none"> HSV 2 	<ol style="list-style-type: none"> 1) Primary infection (mucosa) 2) ganglia 3) latency 4) reactivation 5) REPEAT (recurrent)
Trichomoniasis	<ul style="list-style-type: none"> (asympt-mild) M: dysuria, discharge, pus 	<ul style="list-style-type: none"> (asympt-mild) F: abnormal discharge, vaginitis, inflammation M: dysuria 	<ul style="list-style-type: none"> -Epididymitis -Proctitis -infertility 	<ul style="list-style-type: none"> -microscope (pearl) (f) -pH (f) -culture -PCR -Ab Tests -DNA Probe 	<ul style="list-style-type: none"> Trichomonas vaginalis - flagellated protozoan - communal: 45 mins 	<ol style="list-style-type: none"> 1) attach to mucosa 2) inflammation 3) PMN

Complications:

Gonorrhoea	<ul style="list-style-type: none"> -Epididymitis (RARE) -Proctitis (RARE) -Inguinal lymphadenopathy (RARE) -Urethral stricture (RARE) <p>(Disseminated Gonorrhoea) (women 5%)</p>
Chlamydia	<ul style="list-style-type: none"> -Epididymitis - PID - neonatal (Reiter's Syndrome)
Syphilis	
Herpes	<ul style="list-style-type: none"> -lesions (non-genital) - CNS - neonatal (50% fatal, CNS, 1st episode)
Trichomoniasis	<ul style="list-style-type: none"> -Epididymitis -Proctitis -infertility - PID - Premature Labor - Cervical Neoplasia

Diagnosis:

Gonorrhoea	<ul style="list-style-type: none"> -Gram stain (males only) -culture, NA Hybridization -NAATs
Chlamydia	<ul style="list-style-type: none"> -culture (not widely used) -NAATs
Syphilis	<ul style="list-style-type: none"> -microscope -testing (nontreponemal)
Herpes	<ul style="list-style-type: none"> -culture -PCR -Ab Tests (HSV 1/2)
Trichomoniasis	<ul style="list-style-type: none"> -microscope (pearl) (f) -pH (f) -culture -PCR -Ab Tests -DNA Probe

Syphilis Testing:

NONTRREP	TRREP
VDRL (venereal disease research lab)	FTA-Abs (Fluorescent treponemal antibody absorption)
RPR (rapid plasma reagin)	TP-PA (T. pallidum passive agglutination)
Screening	Confirmation
False positives	more sensitive
any type of syphilis	
Quantitative: (results decline after treatment)	Results remain positive forever

Microbiology & Pathophysiology:

	Microbio	Pathophys
Gonorrhoea	<ul style="list-style-type: none"> Neisseria gonorrhoeae - Gram diplococcus - mucous membranes 	<ol style="list-style-type: none"> 1) mucosal gill 2) submucosal tissue 3) sloughing (damage) 4) PMN 5) abscess (pus)
Chlamydia	<ul style="list-style-type: none"> Chlamydia trachomatis - obligate intracellular parasite - mix between virus/bacteria - maintains cellular identity - no cell wall 	<ol style="list-style-type: none"> 1) EBs enter cell 2) EBs form 3) EBs multiply 4) EBs → EBs 5) cell bursts & releases EBs 6) REPEAT
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