

Chlamydia Screening in General Practice

Anita Sharma

Background

Sexually transmitted infections are reaching epidemic proportions in Britain and Chlamydia is the commonest sexually transmitted bacterial infections.

Prevalence

Chlamydia is thought to be prevalent in 5-10% of 20-24 years old. About 75% of women and 50% of men are asymptomatic. The National Chlamydia Screening Programme currently finds about 8% of young people tested to be positive¹ but this may represent selective testing of higher risk individual.

National Chlamydia Screening Programme (NCSP)

This was initiated in 2003. The aims & objectives were early detection and treatment of asymptomatic infection, to reduce the onward transmission and to prevent the development of sequelae by screening all sexually active under the age of 25 years annually or with each change of sexual partner. The positive rate for this group in 2008 was 8.7%¹.

An ideal setting to provide screening is General Practice. The nationally agreed target is for 25% of 15-25 years olds-males and females to be screened by 2009/2010 and 35% by 2010/2011.

Pathogenesis

Chlamydia is an intracellular bacteria and causes disease by chronic inflammation which is exacerbated by re-infection. It infects the female & male genital tract and is primarily sexually acquired. It can be carried in the throat, thus oral sex can transmit the bacteria.

Symptoms

Over 70% of women and 50% of men are asymptomatic.

Women may experience:

- post coital or inter- menstrual bleeding
- pelvic pain
- dysuria
- increased vaginal discharge
- P.I.D with infertility (10-40% incidence)

Men may experience:

- urethral discharge
- dysuria
- epididymo- orchitis
- urinary frequency

Symptoms in both men and women:

- rectal discharge
- rectal bleed following rectal infection
- pharyngeal infection - rare.

History

Early diagnosis and treatment will reduce the risk of long term complications. A detailed history of following should be taken-

1) History of discharge-Enquire about:

- colour & consistency of the discharge
- odour
- is it aggravated by sexual intercourse
- any associated itching
- when was it first noticed
- any past history of the discharge
- was it diagnosed and treated earlier
- any association of the discharge with menstrual cycle

2) Sexual history:

- date of last sexual intercourse
- were condoms used
- and if so were they used consistently
- regular partner or not
- any other partners in the last six months
- has she or her partner had sex with some one else of the same sex
- any history of sex with a partner from a different country
- any drug abuse in either the woman or her partner

3) Contraception and cytology:

- which contraception does she use
- any recent change of contraception
- whether she is up to date with cervical cytology
- whether all previous screens have been normal

4) Menstrual history:

- date of LMP
- are periods regular or have they altered recently
- any bleeding in between periods or after intercourse

5) History of sexually transmitted infection:

- any past history of STI
- was it treated
- was the partner also treated
- did they have a test of cure

6) Others symptoms:

- lower abdominal pain
- dyspareunia
- dysuria
- any soreness or warts.

7) History of treatment:

- any medication been prescribed.
- any usage of over the counter medications

Examination

Examination of the female patient is usually normal but may show some mucopurulent discharge with contact bleeding. If pelvic inflammation is present there will be tenderness on uterine and adnexal bimanual palpation. The patient may sometimes be unwell with temperature. In suspected rectal chlamydia, Proctoscopy may be normal or may show changes of bloody/mucopurulent discharge or ulceration of mucosa. In men with epididymo-orchitis there may be epididymal and testicular tenderness with or without systemic features.

Investigations

- The older less sensitive (EIAs) Enzyme immunoassays are replaced by Nucleic acid amplification tests (NAATs). They are based on polymerase chain reaction technology.
- In some areas a combined NAT is in use for diagnosis of both Chlamydia & gonorrhoea. NATs are not licensed for rectal or pharyngeal sampling.
- Men should have a first void urine sample tested. In symptomatic women an endocervical swab is the sample of choice. If the patient does not require a per speculum examination a blind vulvovaginal swab could be an appropriate sample. These are almost as accurate and have become the basis for self test kits, now available widely.
- A first catch urine (FCU) sample may be taken for women (having not passed urine for at least one hour before) but this is less sensitive in women than in men²
- Sexually transmitted infection screen should include serological testing for HIV and syphilis. Current guidelines for HIV testing can be found at www.bashh.org.

Prevention

No opportunity should be lost to discuss safe sex with young people at the time of new patient check up and when

prescribing contraception. It is a good practice to screen Chlamydia with informed consent when performing cervical screening in sexually active women under 25 and those over 25 with two or more partners in the last year or a change of partner in the past year.

Management

- It is appropriate to treat Chlamydia in a general practice setting. Treatment is with either macrolides or tetracyclines.
- Oral Azithromycin (Zithromax) 1gm stat should be the first choice as it avoids compliance issues. Patients must be advised to avoid sex for 7 days after the treatment. An alternative is oral Doxycycline (Vibramycin) 100 mg twice daily for 7 days or oral Erythromycin (Erymax) 500 mg twice daily for 14 days.
- Interaction with oral contraceptive pill should be discussed. In pregnant women or those at risk of pregnancy, Azithromycin is still an option.
- Retesting to verify cure is not advocated, partly because of the high cure rate and partly the test using NAA may remain positive for up to five weeks causing confusion.
- All at risk partners in the last six months for females and asymptomatic males or four weeks for symptomatic males should be informed. They should be invited and treated even if the test is negative³. The discussion and treatment can take place by the GP if the patient is registered with the practice or by referral to local genitourinary clinic.

Locally Enhanced Service

Each primary care trust has a Chlamydia screening officer. This year the target from the Department of Health is to screen 25% of patients aged 16 to 25 years registered at the practice who are sexually active.

Fee Structure

On agreeing a service plan with the PCT the general practice can receive: (this may vary from one PCT to another PCT)

- £4.50 per test received in the laboratory for coverage of $\leq 10\%$ of the practice population aged 15-24 years.
- £5.00 per test received in the laboratory for coverage of 10% to $\leq 20\%$ of the practice population aged 15-24 years.
- £6.50 per test received in the laboratory for coverage of 20% to $\leq 25\%$ of the practice population aged 15-24 years.
- £8.00 per test received in the laboratory for coverage of over 25% of the practice population aged 15-24 years.

How To Achieve Targets

- Do a computer search of all the target patients.
- Have a practice meeting
- Involve the whole team: practice nurses, health care assistants and receptionists
- Delegate, delegate and delegate! Practice nurses or health care assistants can screen at risk groups
- "new patient health check" is an ideal opportunity to offer screening. Involve the receptionist to hand out leaflets, forms and urine pots
- Make sure the reception area is suitable for handing out these items otherwise use a side room to ensure privacy

- Decide who would be dealing with positive results, treatment and partner notification
- To earn the money for extra effort you and your staff has made, make sure you use the appropriate read code and ask the practice manager to send the claims monthly
- Remember only patients tested with in the practice premises are included when calculating the percentage screened
- Make sure you reward your staff appropriately with the money otherwise their enthusiasm may soon vanish

COMPETING INTERESTS

None Declared

AUTHOR DETAILS

ANITA SHARMA, General Practitioner, Chadderton South Health Centre, OL9 8RG, UK
Email: anita.sharma@nhs.net

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