

## Treatment of Sexually Transmitted Infections

### Wolverton Centre Guidelines

Updated Jan 2018

***Please ensure that you have the latest version.***

*V: Department Folder/Standard Operating Guides/Clinical Governance/Treatment of Sexually Transmitted infections – updated Jan 2018.doc*

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*Distribution list:*

- *Wolverton Centre Staff*
- *Clinical rooms*
- *Laboratory*
- *Website*
- *Induction*

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# WOLVERTON CENTRE FOR SEXUAL HEALTH

## TREATMENT OF SEXUALLY TRANSMITTED INFECTIONS SUMMARY (January 2018)

| CONDITION   | 1 <sup>st</sup> line treatment   | 2 <sup>nd</sup> line treatment or for penicillin allergy   | Comments  |
|---|--|--|---|
| <b>SYPHILIS</b>   |  |  |   |
| <b>Epidemiological treatment</b>  | Benzathine penicillin 2.4 MU IM – single dose  | Doxycycline 100mg PO BD for 14 days<br>OR<br>Azithromycin 1G PO stat   | Treatment not essential. Please discuss indication for epidemiological treatment with Consultant  |
| <b>Early Syphilis</b> including primary, secondary & early latent (less than 2yrs)                          | Benzathine penicillin 2.4 MU IM – single dose<br>OR<br>Procaine penicillin G 600,000 units IM daily for 10 days – 17 days  | Doxycycline 100mg PO BD for 14 days<br>OR<br>Azithromycin 2G PO single dose<br>OR<br>Azithromycin 500mg PO for 10 days | All cases of early Syphilis must be referred to a Consultant.<br>Resistance to macrolides – thus caution in using.<br>Follow up serology for 1 year required (at 3,6 and 12 months) to check 4 fold reduction in RPR or becomes serofast<br>Advise no SI for 2 weeks from completion of treatment in patient and partner. |
| <b>Late Latent Syphilis</b>   | Benzathine penicillin 2.4 MU IM 3 doses at day 1, 8 & 15<br>OR<br>Procaine penicillin G 600,000 units IM daily for 17 days   | Doxycycline 100mg PO BD for 28 days  | Follow up is needed to ensure completion of Rx but repeat RPR is not required if the pre-treatment RPR is negative.   |
| <b>Neuro / Cardiovascular Syphilis</b><br>Including Neurological / Ophthalmic involvement in early Syphilis | Procaine penicillin G 2.4 MU IM daily for 14 days<br><b>Plus</b><br>Probenecid 500mg PO for 14 days<br><b>Plus</b><br>prednisolone 50mg PO OD for 3 days<br>OR<br>Benzylpenicillin 18 – 24MU daily IV (3 –4MU 4 hourly) 17 days<br><b>Plus</b> prednisolone as above | <b>Penicillin allergy</b><br>Doxycycline 200mg BD<br>28 days   | All cases of neurosyphilis must be referred to a consultant.<br>Consider treatment as an inpatient  |
| <b>Syphilis in HIV positive patients</b>  | Same treatment as in HIV negative patients, assuming regular long term follow up   | If follow up unreliable, treat as for neurosyphilis  | All cases of syphilis in HIV patients must be referred to a Consultant  |

# WOLVERTON CENTRE FOR SEXUAL HEALTH

| CONDITION  | 1 <sup>st</sup> line treatment  | 2 <sup>nd</sup> line treatment   | Comments   |
|--|---|--|--|
| <b>GONORRHOEA</b>  |   |  |  |
| <b>Uncomplicated urethral, cervical, rectal GC and epidemiological treatment</b> | Ceftriaxone 500mg IM single dose*<br><b>plus</b><br>Azithromycin 1G PO single dose      | Cefixime 400mg PO single dose<br><b>plus</b><br>Azithromycin 1G PO single dose<br><br>In severe penicillin allergy or Cephalosporin hypersensitivity: Spectinomycin 2G IM single dose  | <b>Send Cultures prior to all GC treatment</b><br><b>Test of cure</b> required for all gonococcal infections.<br><br><b>Asymptomatic</b> – NAATS 2 weeks after completion of treatment<br><b>Symptomatic</b> – culture 72hrs after completion of treatment |
| <b>Throat GC</b>   | Ceftriaxone 500mg IM single dose*<br><b>plus</b><br>Azithromycin 1G PO oral single dose | Ciprofloxacin 500mg PO single dose<br><b>plus</b><br>Azithromycin 1G PO single dose<br><br>Only prescribe in cases of severe penicillin allergy or Cephalosporin hypersensitivity where culture has confirmed sensitivity to ciprofloxacin | <b>Do not use Cefixime / Spectinomycin for pharyngeal GC due to poor penetration of the drug in the throat.</b><br><b>Discuss multi resistant strains with consultant</b>  |
| <b>GC in pregnancy or breast feeding All trimesters – (unlicensed)</b>           | Ceftriaxone 500mg IM single dose*<br><b>plus</b><br>Azithromycin 1G PO single dose      |  | Ceftriaxone, Cefixime, Spectinomycin are all safe in pregnancy – avoid ciprofloxacin or tetracycline   |
| <b>Ophthalmia neonatorum (gonococcal)</b>  | Ceftriaxone 25 – 50mg / Kg IV or IM single dose, not to exceed 125mg daily for 3 days   |  | Refer to Consultant. Mother needs testing and treating.  |
| <b>Ophthalmia neonatorum (gonococcal)</b>  | Ceftriaxone 25 – 50mg / Kg IV or IM single dose, not to exceed 125mg daily for 3 days   |  | Refer to Consultant. Mother needs testing and treating.  |
|  |   |  |  |

# WOLVERTON CENTRE FOR SEXUAL HEALTH

| CONDITION  | 1 <sup>st</sup> line treatment   | 2 <sup>nd</sup> line treatment              | Comments   |
|--|--|---|--|
| <b>CHLAMYDIA</b>   |  |   |  |
| <b>Asymptomatic Chlamydia</b><br><br><b>Cervix / urethra and epidemiological treatment</b> | Azithromycin 1G PO single dose   | Doxycycline 100mg PO BD for 7 days          | Do not give Doxycycline in pregnancy.<br>Treat partners with Azithromycin 1G PO single dose<br><br><b>Re-test at 3 months in all &lt;25 years</b>  |
| <b>Throat Chlamydia</b>  | Azithromycin 1G PO single dose   | Doxycycline 100mg PO BD for 7 days          | Treat partners with Azithromycin 1G PO single dose   |
| <b>Rectal Chlamydia</b>  | Doxycycline 100mg PO BD for 7 days   | In case of allergy, discuss with Consultant | Treat partners with Azithromycin 1G PO single dose   |
| <b>Rectal Chlamydia in all MSM</b>   | Doxycycline 100mg PO BD for 21 days<br><i>Request LGV in all MSM with rectal chlamydia</i> |   | TOC if patient remains symptomatic - not needed if 3 weeks doxycycline completed & patient is asymptomatic.  |
| <b>Adult Chlamydia conjunctivitis</b>  | Azithromycin 1G PO single dose   |   | Needs STI screen and PN  |
| <b>Chlamydia Ophthalmia neonatorum</b>   | Erythromycin 50mg / kg / day PO into 4 doses daily for 14 days                             |   | Refer to Consultant. Mother needs testing and treating.  |
| <b>Lymphogranuloma venereum (LGV)</b>  | Doxycycline 100mg PO BD for 21 days  | Erythromycin 500mg PO QDS for 21 days       | Discuss all cases with Consultant.<br><b>Ensure HIV test is performed.</b><br>Follow up all patients to ensure symptoms have resolved.<br><i>TOC 2 weeks after completion of treatment if patient remains symptomatic adherence was poor or treated with erythromycin.</i> |

# WOLVERTON CENTRE FOR SEXUAL HEALTH

| CONDITION                         | 1 <sup>st</sup> line treatment   | 2 <sup>nd</sup> line treatment   | Comments   |
|-----------------------------------|--|--|--|
| <b>NSU</b>                        |  |  |  |
| <b>Uncomplicated NSU</b>          | Doxycycline 100mg PO BD for 7 days   | Azithromycin 500mg stat then 250mg OD for 4 days<br>Or<br>Ofloxacin 400mg OD for 7 days  | Partners of NSU patients should be treated with Doxycycline 100mg PO BD for 1 week (not in pregnancy) or same medication that was successful in index case   |
| <b>Persistent NSU</b>             | <i>If treated with Doxycycline 1<sup>st</sup> line:</i><br>Azithromycin 500mg PO single dose, then 250mg PO daily for next 4 days<br><b>plus</b><br>Metronidazole 400mg PO BD for 5 days<br><br><i>If treated with Azithromycin first line:</i><br>Doxycycline 100mg PO BD for 7 days<br><b>plus</b><br>Metronidazole 400mg PO BD for 5 days | Moxifloxacin* 400mg OD 14 days<br><b>plus</b><br>Metronidazole 400mg PO BD for 5 days<br><br>*Discuss with consultant first as should only be used in pts at high risk of macrolide resistant MG - potential severe liver reactions. | Refer to CPC if symptoms persist. Ensure that partner is treated with the same antibiotic regime that was successful in the index case.<br><br>NB. Mycoplasma genitalium causes 10-20% NSU and 40% organisms may be resistant to macrolides. |
| <b>Mycoplasma genitalium (MG)</b> | No routine testing available in SWLP at present however patients may present as contacts if their partners have been tested elsewhere.<br><i>Confirmed contacts should be treated:</i><br>Azithromycin 500 mg stat then 250 mg daily for next 4 days   |  |  |
| <b>EPIDIDYMO-ORCHITIS</b>         |  |  |  |
|                                   | Doxycycline 100mg PO BD for 14 days<br><b>Plus</b><br>Ceftriaxone 500mg IM single dose<br><b>Plus</b><br>Azithromycin 1G single dose   | Ofloxacin* 200mg PO BD for 2 weeks<br><br>(*Do not use if GC is suspected due to high rates Quinolone resistance)  | Use Ofloxacin if enteric organisms most likely, i.e. >35 years and low risk for STI<br><br>Treat partners with Azithromycin 1G PO single dose  |

# WOLVERTON CENTRE FOR SEXUAL HEALTH

| CONDITION                    | 1 <sup>st</sup> line treatment   | 2 <sup>nd</sup> line treatment  | Comments  |
|------------------------------|--|---|---|
| <b>PID</b>                   |  |   |   |
|                              | <p>Ceftriaxone 500mg IM single dose<br/> <b>Plus</b><br/>           Doxycycline 100mg PO BD for 14 days<br/> <b>Plus</b><br/>           Metronidazole 400mg PO BD for 14 days</p> <p><i>(plus Azithromycin 1G single dose if GC positive on microscopy, contact of GC or high risk for GC)</i><br/> <i>If GC positive on NAATs take a culture swab and retreat with Ceftriaxone and Azithromycin)</i></p>  | <p>Discuss with Consultant:<br/>           Ofloxacin* 400mg PO BD for 14 days<br/> <b>Plus</b><br/>           Metronidazole 400mg PO BD for 14 days<br/>           OR<br/>           Moxifloxacin 400mg OD 14 days<br/>           *Do not prescribe if GC is suspected due to high rates quinolone resistance</p> | <p>Not in pregnancy – discuss treatment options with Consultant.</p> <p>Treat partner with Doxycycline 100mg BD 7 days</p>  |
| <b>TRICHOMONAS</b>           |  |   |   |
| <b>Uncomplicated</b>         | Metronidazole 2G oral single dose  | Metronidazole 400mg oral BD 5 days  | Metronidazole – antabuse effect during and for 48hrs after treatment - avoid alcohol<br>Treat male partners epidemiologically<br>TOC after 1 week   |
| <b>Relapsing / recurrent</b> | Discuss with Consultant<br>Metronidazole 400mg PO TDS<br><b>plus</b><br>MTZ suppository 1G PV for 7 days   | Tinidazole PO 2G BD 10 days   | Consider TV culture for sensitivity to Metronidazole  |
| <b>GENITAL WARTS</b>         |  |   |   |
|                              | <p>Treatment depends on morphology, number and distribution:</p> <ul style="list-style-type: none"> <li>• <b>Soft / exophytic:</b> cryotherapy stat plus Warticon cream TTA (<b>Warticon cream</b> apply x 2 per day for 3 consecutive days for 4 weeks). Review after 4 weeks if not cleared</li> <li>• <b>Keratinised / single or few:</b> As above</li> <li>• <b>Keratinised / extensive:</b> Clinic based treatment with cryotherapy and Warticon cream or 5% Imiquimod cream or 25% podophyllin. Review with consultant to optimise treatment.</li> </ul> | <p>2<sup>nd</sup> line treatment for both keratinised and non-keratinised warts:<br/> <b>Imiquimod 5% cream</b> nocte x 3 times (M, W, F) a week.<br/>           Wash off next morning.</p>   | <p>If warts persist after 2 months of treatment, refer to CPC for review.</p> <p>Note: Do not use Podophyllin or Warticon or Imiquimod in pregnancy.</p> <p>All damage latex condoms.</p> |

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| CONDITION                              | 1 <sup>st</sup> line treatment  | 2 <sup>nd</sup> line treatment   | Comments   |
|--|---|--|--|
| <b>BACTERIAL VAGINOSIS</b>             |   |  |  |
|  | Metronidazole 2G PO single dose   | Metronidazole 400mg PO BD for 5 days<br><b>or</b><br>Clindamycin cream 2% PV OD for 7 days<br><br><b>Clindamycin cream damages latex condoms</b> | <b>Pregnancy 1<sup>st</sup> trimester:</b><br>Amoxicillin 500mg oral TDS 7 days<br><b>or</b><br>Metronidazole 400mg PO BD for 5 days<br><br><b>2<sup>nd</sup> and 3<sup>rd</sup> trimester:</b><br>Metronidazole 2G PO single dose.<br><br>Refer to CPC if frequent recurrences. |
| <b>CANDIDA</b>                         |   |  |  |
| <b>Female: uncomplicated</b>           | Clotrimazole pessary 500mg PV single dose<br><b>or</b><br>Ecostatin pessary 150mg PV single dose<br><br><b>plus</b> Clotrimazole 1% cream<br><b>plus</b> Aqueous cream as a soap substitute                         | Fluconazole 150mg PO single dose<br><b>plus</b><br>Clotrimazole 1% cream   | Do not use Fluconazole in pregnancy<br><br><b>Pessaries damage latex condoms</b>   |
| <b>Female: Complicated/recurrent</b>   | Clotrimazole pessaries 100mg PV for 6 – 12 days<br><b>or</b><br>Fluconazole 150mg PO single dose - two doses 72hrs apart<br><br><b>plus</b> Clotrimazole 1% cream<br><b>plus</b> Aqueous cream as a soap substitute |  | Refer recurrent or persistent candida to CPC. Request Candida spp. identification & sensitivities in advance.  |
| <b>Male: uncomplicated / balanitis</b> | Clotrimazole 1% cream<br>Or Canesten HC<br><br><b>plus</b> Aqueous cream as a soap substitute   | Fluconazole 150mg PO single dose   | Refer to CPC if persistent symptoms<br>Test urine for glucose  |



# WOLVERTON CENTRE FOR SEXUAL HEALTH

| CONDITION  | 1 <sup>st</sup> line treatment  | 2 <sup>nd</sup> line treatment   | Comments  |
|--|---|--|---|
| <b>GENITAL HERPES</b>  |   |  |   |
| <b>Primary episode</b>   | Aciclovir 400mg PO TDS for 5 days<br>OR<br>Aciclovir 200mg PO x 5 per day for 5 days<br><br><b>Plus, if indicated for pain</b><br>2% Lidocaine gel topically and oral analgesia   | Valaciclovir 500mg PO BD for 5 days<br><br>Consider IV treatment in severe cases | Continue treatment until new lesions have ceased to appear<br><br><b>Severe cases may need 10 days of treatment</b>   |
| <b>Immunosuppressed patients</b>   | Aciclovir 800mg PO TDS for 5 – 10 days<br>OR<br>Aciclovir 400mg PO x 5 per day for 5 – 10 days  | Consider IV treatment in severe cases  | If severe, discuss with Consultant  |
| <b>Recurrent episodes</b>  | Not usually necessary to treat unless frequent or severe<br><br>Advise salt water bathing   |  | If frequent recurrences (>6 – 8 per year) or severe symptoms, refer to CPC for review & consideration of prophylaxis:<br>Aciclovir 400mg twice daily<br>OR<br>valaciclovir 500mg OD |
| <b>Herpes in pregnancy, 1<sup>st</sup>, 2<sup>nd</sup> or 3<sup>rd</sup> trimester<br/>Primary / recurrent episode</b> | Treat as for non-pregnant women<br>Aciclovir 400mg PO TDS x 5 days<br>OR<br>200mg PO x 5 per day for 5 days<br><br>Prophylactic Aciclovir 400mg PO TDS from 36 weeks gestation until delivery   |  | Aciclovir is not licensed in pregnancy, but there is substantial evidence supporting its safety.<br><br><b>Refer all pregnant women with known or suspected HSV to CPC.</b>         |
| <b>MOLLUSCUM CONTAGIOSUM</b>   |   |  |   |
|  | In immune-competent patients this is a self-limiting condition so treatment may not be required.<br>If immunosuppressed and/or treatment is required:<br>5% Warticon cream applied topically on 3 consecutive days each week for maximum of 4 weeks<br>OR<br>gentle single treatment cryotherapy. |  | Immunosuppressed patients or those with facial lesions to be reviewed by senior clinician   |

# WOLVERTON CENTRE FOR SEXUAL HEALTH

| CONDITION                      | 1 <sup>st</sup> line treatment   | 2 <sup>nd</sup> line treatment   | Comments  |
|--------------------------------|--|--|---|
| <b>SCABIES AND PUBIC LICE</b>  |  |  |   |
| <b>Scabies</b>                 | <p>Permethrin 5% cream. (Supply 30 – 60g per adult)<br/> OR<br/> Malathion 0.5% Aqueous lotion (Derbac-M).<br/> Supply 100ml (2 bottles) per adult.<br/> Apply from head down, leave on at least 12hrs, re-apply to hands after washing, wash bed clothes at 50°C</p>  | Repeat treatment may be required one week later  | <p>Permethrin cream safe in pregnancy and breastfeeding.</p> <p>All partners and household contacts need treating (including children).</p> <p>Antihistamine or Crotamiton cream to control itch.</p> |
| <b>Pubic lice</b>              | <p>Malathion 0.5% Aqueous lotion (Derbac-M). Apply to damp hair and wash out after 12hrs<br/> OR<br/> Permethrin 1% cream rinse (Lyclear). Apply to dry hair and wash out after 10 minutes.</p> <p>Repeat application after 3 – 7 days<br/> Eyelash infestation: smear with Derbac-M or Lyclear whilst keeping eye closed for 10 minutes, then wash off.</p> | Re-treat with different product, in case of failure  | Screen and treat all sexual partners  |
| <b>URINARY TRACT INFECTION</b> |  |  |   |
|                                | <p>Cephalexin 500mg TDS for 3 – 5 days</p> <p>Pregnant women need 7 days of treatment.</p> <p>Ideally, treat according to culture &amp; sensitivity on MSU</p>   | <p>Treat according to culture and sensitivity</p> <p>Trimethoprim 200mg PO BD for 3 – 5 days</p> | <p>Refer women with recurrent UTIs to CPC</p> <p>Refer all men with a documented UTI to Urology</p> <p>Trimethoprim contraindicated in pregnancy</p>  |

## Appendix 1

### Reconstitution of Ceftriaxone 250mg powder in Lignocaine 1%

Ceftriaxone may be administered by deep intramuscular injection into the buttock

#### **For intramuscular injection:**

Using two vials of 250mg ceftriaxone powder for solution, dissolve the contents of each 250mg vial in 1ml of 1 % Lidocaine solution, discard immediately if solution is not clear and deposit free. 2ml of the resulting solution provides 500mg ceftriaxone.

#### **Warning**

Solutions reconstituted with Lidocaine Hydrochloride BP solution should not be administered intravenously.

#### **Reference**

Ceftriaxone 250mg Rocephin (Roche) SmPC updated May 2017.

Accessed via <https://www.medicines.org.uk/emc/> 08/01/18

## Appendix 2

### **Reconstitution Benzathine penicillin powder with lidocaine (unlicensed)**

Reconstitute the vial with 8ml of 1% Lidocaine Hydrochloride BP solution. Split the resultant suspension into two equal volumes.

The suspension should be administered by deep intramuscular injection in two different sites.

Administration:

1. Add solvent to vial and turn the vial gently whilst warming it in your hands
2. Extract the suspension with a needle different from the one you will use for injection
3. To inject, insert an “empty” 0.9 calibre needle into the patient
4. Place the syringe and aspirate to check that no blood comes out.
5. Inject by deep intramuscular injection.

### **Warning**

Solutions reconstituted with Lidocaine Hydrochloride BP solution should not be administered intravenously.

### **Reference**

**Lentocilin S Benzathine Benzyl Penicillin – Patient information leaflet –revision of text 2012**

## Appendix 3

### Procaine penicillin

Reconstitute two 1.2 mega unit vials with 4ml of 1% lidocaine hydrochloride BP solution each. The required volume should be administered by deep intramuscular injection into two different sites.

Inadvertent intravenous administration of Lidocaine can cause bradycardia (which may lead to cardiac arrest), fitting and/or sedation. Use the "aspiration technique" of injection to minimise the risk of this happening.

### Contraindications

- Allergy to penicillin or lidocaine
- Concomitant anticoagulant therapy
- Bleeding diathesis (eg. Haemophilia)

### Precautions

- Patients with penicillin allergy, cross reactivity to other beta-lactams such as cephalosporins should be taken into account.

### Warning

Solutions reconstituted with Lidocaine Hydrochloride BP solution should not be administered intravenously.

## Appendix 4

### Spectinomycin

#### **BASHH CEG statement**

**Spectinomycin has been in short supply for some time in the UK. The main wholesalers of non-licensed medicines in the UK are IDIS and Durbin.**

**Durbin import it from an EU source (Trobicin® 2g injection - Pfizer).**

**The information supplied with Trobicin® may not be in English. English translation is available on the BASHH website.**

**Please seek advice from pharmacy if alternative brand has been supplied.**