## Herpes simplex - genital - Management

**View full scenario**

safe practical clinical answers - *fast*

### How do I know my patient has it?

▪ Ideally, the diagnosis of genital herpes should be carried out by a specialist in genito-urinary medicine (GUM). Confirmation of genital herpes requires identification of the herpes simplex virus (usually through viral culture), as a diagnosis based on clinical findings alone is not conclusive. GUM will carry out diagnosis, treatment, screening for other sexually transmitted infections (STIs), counselling, and follow up.

▪ A history and examination is necessary in primary care (even if the person is being referred) to determine the likelihood of genital herpes and exclude other causes of genital ulceration (see Differential diagnosis for more information).

o Ask about symptoms including painful ulcers, dysuria, vaginal or urethral discharge, malaise, and fever; their onset and duration, and whether similar symptoms have been experienced previously. Ask about previous STIs, recent sexual contact and relationship status, number of partners, and whether the person has a history of cold sores.

o Examine the person's external genitalia and surrounding skin (lesions are usually bilateral with signs of redness, blistering, and ulceration). Lesions can also affect the vagina and cervix in women, and men who have sex with men may present with herpes proctitis. There may also be tender bilateral inguinal lymphadenitis. Atypical herpes lesions can look different from typical genital blisters and ulceration, with an appearance of fissures, patchy erythema, linear lesions or excoriations.

o In people unable to attend GUM, take a swab from the base of a lesion for viral culture or polymerase chain reaction (PCR); seek advice if there is doubt about diagnostic sampling and transport.

### Additional information

▪ Viral culture for the detection of the herpes simplex virus (HSV) is the most widely used method for the diagnosis of genital herpes in the UK. HSV detection by polymerase chain

reaction (PCR) increases detection rates by 11–71% compared with viral culture, but may not be widely available in the UK [BASHH, 2007].

### Basis for recommendation

CKS identified no national guidelines for assessing genital herpes in primary care. These recommendations are based on expert opinion [Sen and Barton, 2007], pragmatism, and good clinical practice.

- Diagnosis in GUM

  - The clinical diagnosis of genital herpes may not be easy or reliable in primary care, as symptoms and signs vary in frequency and severity between different people, and can mimic other medical conditions [Gupta et al, 2007].

- Taking a history

  - Several prevalence studies (mainly from the US) have shown a higher number of sexual partners, young age of first sexual intercourse, and a history of other sexually transmitted infections to be positively associated with herpes simplex virus (HSV) type 2 infection [Wald, 2004].

- Carrying out an examination

  - If it is necessary to diagnose genital herpes in primary care, a viral culture or polymerase chain reaction for HSV is essential. It is estimated that even an experienced clinician will fail to identify 30–70% of cases of genital herpes based on history alone [Wald, 2004]. Viral culture has a specificity of virtually 100%, but the quality of specimens, storage of samples, and mode and length of transport influence sensitivity [BASHH, 2007].

## What else might it be?

- A number of different conditions can resemble genital herpes:

  - Vulvovaginal candidiasis — it is estimated that over 50% of women infected with herpes simplex virus are misdiagnosed as having candidiasis or another cause of vulvitis.

- Other infections (e.g. gonorrhoea, non-gonococcal urethritis, syphilis, bacterial vaginosis).
- Skin disorders (e.g. atopic or contact dermatitis, psoriasis, scabies, folliculitis, lichen sclerosis).
- Other systemic conditions (e.g. Reiter's syndrome, Behçet's syndrome, Crohn's disease, and malignancy).

**Basis for recommendation**

- The information regarding genital herpes being mistaken for vulvovaginal candida comes from a review article [Mark et al, 2003] and Primary Care Toolkit from the International Herpes Management Forum [Patrick, 2004]. The information regarding other infections, skin disorders, and other systemic conditions resembling genital herpes comes from review articles [Mark et al, 2003; Kimberlin and Rouse, 2004].

## Herpes simplex - genital - Management

**View full scenario**

CKS safe practical clinical answers - *fast*

### Who should be referred with genital herpes?

- Ideally, all people with suspected genital herpes should be referred to a specialist in genito-urinary medicine for diagnosis, treatment, screening for sexually transmitted infections, counselling, and follow up.
- It is essential to refer the following people to the appropriate speciality:
  - Pregnant women.
  - Immunocompromised individuals.
  - People with HIV can be treated in primary care provided that the infection is uncomplicated and not severe. However, prompt referral is indicated if there is no response to treatment (i.e. lesions are still forming after 3–5 days of treatment).

- Those with severe local secondary infection.
- Anyone with systemic herpes infection (e.g. meningitis).

### Basis for recommendation

CKS identified no national referral guidelines for genital herpes. In the absence of established policy, these recommendations are pragmatic advice based on good clinical practice.

- As genital herpes is difficult to diagnose clinically and is associated with psychosocial comorbidity, the initial management and subsequent follow up (counselling) should be carried out by a specialist.
- Specialist advice is needed for pregnant women who acquire a primary infection.
  - In late pregnancy the risk of neonatal transmission is greatest, occurring in about 40% of cases. Such women will require a Caesarean section for delivery.
  - Primary infections acquired in the first or second trimester can be treated with either oral or intravenous antiviral medication. Women will usually be offered continuous antiviral medication in the last 4 weeks of pregnancy to reduce the risk of clinical recurrence at term and the need for delivery by Caesarean section.
  - In women with recurrent genital herpes a Caesarean section is not required for attacks in the third trimester, unless lesions are present at the time of delivery [BASHH, 2007; Sen and Barton, 2007].
- Specialist advice is needed in people who are immunocompromised as episodes may be longer and more severe, and there is a higher risk of complications. Treatment regimens may be complicated by refractory lesions and the emergence of resistant strains of herpes simplex virus [Patrick, 2004; BASHH, 2007].
- The recommendation that people with HIV can be treated in primary care is based on a guide for GPs, practice nurses, and other members of the primary care team published by the Medical Foundation for AIDS & Sexual Health (MedFASH) [Madge et al, 2005].

## How should I treat someone with genital herpes when a referral is not possible?

- Prescribe oral aciclovir (200 mg five times a day) within 5 days of the start of the episode or while new lesions are forming. Continue for 5 days, or longer if new lesions are still forming while on treatment.

- Self-care measures may be useful for some people. If appropriate, advise the person to:

  - Clean the affected area with plain or salt water to help prevent secondary infection and promote healing of lesions.

  - Apply vaseline or a topical anaesthetic (e.g. lidocaine 5%) to lesions to help with painful micturition, if required.

  - Increase fluid intake to produce dilute urine (which is less painful to void). Urinate in a bath or with water flowing over the area to reduce stinging.

  - Avoid wearing tight clothing, which may irritate lesions.

  - Take adequate pain relief (e.g. oral paracetamol).

  - Avoid sharing towels and flannels with household members (although it is very unlikely that the virus would survive on an object long enough to be passed on, it is sensible to take steps to prevent this).

- Advise all people to abstain from sex (including non-penetrative and orogenital sex) until follow up, or until lesions have cleared.

### Basis for recommendation

These recommendations are based on the British Association for Sexual Health and HIV (BASHH) *2007 national guideline for the management of genital herpes* [BASHH, 2007], expert opinion in narrative reviews [Sen and Barton, 2007], and, when available, trial evidence.

- Self-care advice is based primarily on expert opinion [New Zealand Herpes Foundation, 2007; Sen and Barton, 2007], pragmatism, and good clinical practice. CKS could not identify any controlled trials to support self-care measures in the management of primary genital herpes.

- Aciclovir, valaciclovir, and famciclovir are licensed for the treatment of genital herpes [BNF 55, 2008]. The evidence from five randomized controlled trials (RCTs) shows no difference in

efficacy, tolerability, or toxicity in the management of primary genital herpes. BASHH states that any one of the three antiviral drugs can be used to treat genital herpes. However, CKS recommends that oral aciclovir should be prescribed based on the cost implications. The cost for a 5-day course of aciclovir is £4.01, valaciclovir is £21.86, and famciclovir is £111.35 [Prescription Pricing Division, 2008].

- Antiviral drugs are usually not used for longer than 5 days. There is no evidence of benefit when they are used for a longer duration. However, experts [Gupta et al, 2007] believe that a longer course of treatment may be needed for severe attacks or with actively forming lesions.

## How should I treat someone with HIV when referral is not needed?

- Ideally, all people with HIV and suspected genital herpes should be referred to a specialist in genito-urinary medicine for diagnosis, treatment, screening for sexually transmitted infections, counselling regarding risks to themselves and others, and follow up (especially if they are known to have a low CD4 count).

- However, if referral is declined, people with HIV can be treated in primary care provided that the infection is uncomplicated and not severe.

  - Treat with oral aciclovir 400 mg five times a day for 7–10 days — the dose is higher and the duration longer than for people who are not immunocompromised.

  - If new lesions are still forming after 3–5 days, seek specialist advice.

- If infection is severe, the person is systemically unwell, or complications are suspected, admit for treatment with intravenous aciclovir.

  - In the absence of antiretroviral treatment, primary genital herpes may be severe and prolonged with risk of progressive, multifocal, and coalescing mucocutaneous anogenital lesions.

  - Complications include fulminant hepatitis, pneumonia, neurological disease, and disseminated infection.

- Self-care measures may be useful for some people. If appropriate, advise the person to:

  - Clean the affected area with plain or salt water to help prevent secondary infection and promote healing of lesions.

- Apply vaseline or a topical anaesthetic (e.g. lidocaine 5%) to lesions to help with painful micturition, if required.

- Increase fluid intake to produce dilute urine (which is less painful to void). Urinate in a bath or with water flowing over the area to reduce stinging.

- Avoid wearing tight clothing, which may irritate lesions.

- Take adequate pain relief (e.g. oral paracetamol).

- Avoid sharing towels and flannels with household members (although it is very unlikely that the virus would survive on an object long enough to be passed on, it is sensible to take steps to prevent this).

▪ Advise all people to abstain from sex (including non-penetrative and orogenital sex) until follow up, or until lesions have cleared.

### Basis for recommendation

These recommendations are based on the British Association for Sexual Health and HIV (BASHH) *2007 national guideline for the management of genital herpes* [BASHH, 2007], a guide for GPs, practice nurses, and other members of the primary care team published by the Medical Foundation for AIDS & Sexual Health (MedFASH) [Madge et al, 2005], and expert opinion in narrative reviews [Sen and Barton, 2007].

▪ Aciclovir, valaciclovir, and famciclovir are licensed for the treatment of genital herpes in people with HIV [BNF 55, 2008]. CKS could not identify any controlled trials of antivirals for the first episode of genital herpes in people with HIV. However, there is evidence for episodic treatment of recurrent genital herpes in people with HIV. BASHH states that any one of the three antiviral drugs can be used to treat genital herpes in people with HIV. However, CKS recommends that oral aciclovir should be prescribed based on the cost implications. The cost for a 10-day course of aciclovir is £6.12, valaciclovir is £82.19, and famciclovir is £148.45 [Prescription Pricing Division, 2010].

▪ Self-care advice is based primarily on expert opinion [New Zealand Herpes Foundation, 2007; Sen and Barton, 2007], pragmatism, and good clinical practice. CKS could not identify any controlled trials to support self-care measures in the management of primary genital herpes.

## What advice and follow is needed in a person with genital herpes?

- People should be followed up by a specialist in genito-urinary medicine (GUM): to be given the opportunity to discuss the implication of the diagnosis; to receive counselling; to discuss the transmission risk and prognosis; and to be screened for other sexually transmitted infections (STIs).

- For people unwilling to attend GUM:

o Follow up after 5 days to determine the effectiveness of treatment and discuss the virology swab result. Explain that even with a negative swab result, they may still have genital herpes. The diagnosis can only be confirmed by further attacks and herpes simplex virus detection.

o Explain that a first clinical episode may not necessarily indicate recent infection nor that a partner has been unfaithful (if appropriate). They could have acquired the infection (sub-clinically) years previously, or the herpes virus (type 1) may have spread from elsewhere on their body (such as lips or fingers).

o Explain that transmission can occur when there are no symptoms (asymptomatic shedding), but the risk is higher when symptomatic. Advise the person to:

o Avoid sex (including orogenital sex) if lesions are present.

o Use condoms with new or uninfected partners. Explain that condoms cannot completely prevent transmission, due to close skin contact or contact with infected secretions during foreplay.

o Advise people who are concerned about transmitting genital herpes to long-term partners that their partner may already be infected even if they do not have symptoms, and that they should seek advice from a specialist in GUM for screening.

o Explain there is no cure for genital herpes at present. However, symptoms improve (reduce in frequency and severity) with time and can be well controlled. On average, people have 4–5 attacks of genital herpes a year in the first 2 years.

▪ Consider screening for other STIs. For more information, see the CKS topic on Chlamydia - uncomplicated genital.

▪ Provide written information (patient information leaflets) from the Herpes Viruses Association (HVA) at www.hva.org.uk/pil.html or the Family Planning Association www.fpa.org.uk. Offer people further support from the Herpes Viruses Association's helpline 0845 123 2305 (weekdays) or www.herpes.org.uk.

### Basis for recommendation

These recommendations are based on expert opinion [New Zealand Herpes Foundation, 2007; Sen and Barton, 2007] and the British Association for Sexual Health and HIV (BASHH) *2007 national guideline for the management of genital herpes* [BASHH, 2007].

▪ Counselling, follow up, and providing up-to-date information are essential for people with genital herpes, as the condition is chronic, causes considerable distress, and disrupts sexual relationships.

▪ Viral culture or polymerase chain reaction (PCR) is necessary to confirm the diagnosis. Wherever possible, viral typing should be requested (if available); the type of herpes simplex virus (HSV) will not immediately affect management of a first episode, but will have implications for diagnosis, prognosis, counselling, and long-term management [BASHH, 2007].

▪ The cumulative risk of transmission from an infected man to a seronegative woman is about 7% per year. The cumulative risk of transmission from an infected woman to a seronegative man is probably less, at around 3% per year [Mark et al, 2003].

▪ Condoms are probably effective in reducing transmission of HSV from men to women, although there is less evidence that they are effective at reducing transmission from women to men [Casper and Wald, 2002]. Effectiveness may be reduced by lack of acceptance, poor compliance, poor technique, and mechanical failure of the condom [Langenberg, 2004].

▪ There is an increased risk of transmission immediately before, and immediately after, a symptomatic episode [Wald, 2004]. However, nearly everyone, both men and women, with HSV type 2 infection sheds viruses at some time without symptoms. Asymptomatic shedding is more frequent with HSV type 2 infection, in the first 12 months after acquiring the infection, and in those with more frequent symptomatic episodes.

- Auto-inoculation (spreading infection to other parts of the body by means of the hands) is a hypothetical risk, especially during a first clinical episode [Remington, 2004].

- Screening of other sexually transmitted diseases, such as chlamydia, should be carried out. Usually, this should be deferred until the primary infection has resolved, and the tests should be performed at a genito-urinary medicine clinic, although investigations can be made in primary care if this is not possible.

## When should I suspect sexual abuse of a young person?

- Although rare, consider the possibility of sexual abuse in any child or young person with genital herpes, particularly in the following circumstances:

  - The child is younger than 13 years of age, unless there is clear evidence of mother-to-child transmission during birth, or of blood contamination.

  - The young person is 13 to 15 years of age, unless there is clear evidence of mother-to-child transmission during birth, blood contamination, or that the STI was acquired from consensual sexual activity with a peer.

  - The young person is 16 to 17 years of age and there is no clear evidence of blood contamination or that the STI was acquired from consensual sexual activity *and* there is a clear difference in power or mental capacity between the young person and their sexual partner, in particular when the relationship is incestuous or with a person in a position of trust (such as a teacher, sports coach, minister of religion) *or* there is concern that the young person is being exploited.

- Follow appropriate child protection procedures and refer to a paediatrician if necessary.

### Basis for recommendation

Suspected sexual abuse

- These recommendations are based on guidance from the National Institute of Health and Clinical Excellence [NICE, 2009].

## Prescriptions

For information on contraindications, cautions, drug interactions, and adverse effects, see the electronic Medicines Compendium (eMC) (http://emc.medicines.org.uk), or the British National Formulary (BNF) (www.bnf.org).

### Acute episode: aciclovir for 5 days

#### Age from 13 years onwards

**Aciclovir tablets: 200mg five times a day for 5 days**

Aciclovir 200mg tablets
Take one tablet five times a day for 5 days.
Supply 25 tablets.

**Age**: from 13 years onwards
**NHS cost**: £4.01
**Licensed use**: yes

### Acute episode (people with HIV): aciclovir for 7-10 days

#### Age from 13 years onwards

**Aciclovir tablets: 400mg five times a day for 7 days**

Aciclovir 400mg tablets
Take one tablet five times a day for 7 days.
Supply 35 tablets.

**Age**: from 13 years onwards
**NHS cost**: £4.88
**Licensed use**: yes

**Aciclovir tablets: 400mg five times a day for 10 days**

Aciclovir 400mg tablets
Take one tablet five times a day for 10 days.
Supply 50 tablets.

**Age**: from 13 years onwards
**NHS cost**: £7.98
**Licensed use**: yes

### Analgesia use when required (from 13 years and older)

#### Age from 13 years onwards

**Paracetamol tablets: 500mg to 1g up to four times a day**

Paracetamol 500mg tablets
Take one or two tablets every 4 to 6 hours when required for pain relief. Maximum of 8 tablets in 24 hours.
Supply 50 tablets.

**Age**: from 13 years onwards
**NHS cost**: £0.79
**Licensed use**: yes

### Ibuprofen tablets: 400mg three times a day

Ibuprofen 400mg tablets
Take one tablet three times a day when required for pain relief. Do not exceed the stated dose.
Supply 21 tablets.

**Age**: from 13 years onwards
**NHS cost**: £0.56
**OTC cost**: £0.99
**Licensed use**: yes

### Codeine 30mg tablets: add on to paracetamol if required

Codeine 30mg tablets
Take one to two tablets every 4 to 6 hours when required for pain relief. Maximum of 8 tablets in 24 hours.
Supply 28 tablets.

**Age**: from 13 years onwards
**NHS cost**: £0.88
**Licensed use**: yes

## Topical anaesthetics

### Age from 13 years onwards

### Lidocaine 5% ointment

Lidocaine 5% ointment
Apply to the lesions to ease pain. Use 5 minutes before urinating to ease pain associated with passing urine.
Supply 15 grams.

**Age**: from 13 years onwards
**NHS cost**: £0.88
**Licensed use**: yes

## Herpes simplex - genital - Management

**View full scenario**

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### How should I assess a person with recurrent genital herpes?

▪ Ask how the diagnosis of genital herpes was confirmed and when this was carried out. Ideally, the person should have seen a specialist in genito-urinary medicine and had a viral culture or polymerase chain reaction (PCR) to identify the herpes simplex virus.

▪ Ask about symptoms, including ulcers, urethral discharge, and dysuria; discuss whether lesions are still forming, their onset (determine if started within 5 days), and whether the person experiences prodromal sensations (tingling or burning).

▪ Ask about previous attacks (within the last year), their frequency and severity (usually decreasing with time), and management (self-care and/or antiviral medication).

▪ Ask whether the person has identified personal trigger factors (e.g. sexual intercourse, sunlight, physical illness, excess alcohol, stress).

▪ Carry out an external examination of the genitalia and surrounding skin (lesions are usually unilateral and localized to the same area in each attack).

▪ Determine the person's understanding of genital herpes (prognosis, risk of transmission) and enquire (if appropriate) about the affect on self-esteem, mood, and relationships. See advice on genital herpes.

### Additional information

▪ Viral culture for the detection of the herpes simplex virus (HSV) is the most widely used method for the diagnosis of genital herpes in the UK. HSV detection by polymerase chain reaction (PCR) increases HSV detection rates by 11–71% compared with viral culture, but may not be widely available in the UK [BASHH, 2007].

### Basis for recommendation

CKS identified no national guidelines for assessing genital herpes in primary care. These recommendations are based on expert opinion [Sen and Barton, 2007], pragmatism, and good clinical practice.

- A thorough history and clinical examination is important to exclude other diagnoses in addition to genital herpes.

- Asking about the onset of symptoms and the use of self-care measures will help determine whether antiviral drugs should be used for treating this episode. Determining the frequency and severity of attacks will guide how future attacks need to be managed (episodic or suppressive treatment). See treatment of recurrent genital herpes.

- CKS could not identify any observational studies on trigger factors causing recurrences of genital herpes. However, if the person recognizes personal triggers, then it is pragmatic to avoid these in the future.

- Observational studies have shown that psychosocial morbidity can be more debilitating than the physical features of genital herpes [Mark et al, 2003]. Depression, fear of rejection, and feelings of isolation are commonly reported [Remington, 2004].

## When should I refer someone with recurrent genital herpes?

- Consider referring people:

  - Who have breakthrough genital herpes episodes on suppressive treatment.

  - For advice on suppressive treatment, if they are concerned about transmitting the herpes simplex virus to long-term partners who are not infected.

### Basis for recommendation

CKS identified no national referral guidelines for genital herpes. In the absence of established policy, these recommendations are based on pragmatism, and good clinical practice.

- The British Association for Sexual Health and HIV (BASHH) *2007 national guideline for the management of genital herpes* [BASHH, 2007] suggests that in people who are having breakthrough episodes whilst on suppressive antiviral medication, the daily dose of medication may be increased to control symptoms and reduce further attacks. However, the guideline is

unclear about for how long the increased dose should be continued, what follow up is required, and when referral to a specialist is appropriate. Due to the lack of clarity in the guideline, CKS recommends that a primary healthcare professional should seek specialist advice if necessary, based on their own clinical experience, when a person on suppressive treatment presents with breakthrough episodes.

- There is evidence from a randomized controlled trial that suppressive treatment reduces the rate of asymptomatic shedding of herpes simplex virus and, consequently, reduces transmission of the virus [Corey et al, 2004].

## How should I treat someone with recurrent genital herpes?

- Self-care measures may be helpful for some people. If not already tried, advise the person to:

  - Clean the affected area with plain or salt water to help prevent secondary infection and promote healing of lesions.

  - Apply vaseline or a topical anaesthetic (e.g. lidocaine 5%) to lesions to help with painful micturition, if required.

  - Increase fluid intake to produce dilute urine (which is less painful to void). Urinate in a bath or with water flowing over the area to reduce stinging.

  - Avoid wearing tight clothing (which may irritate lesions) and use adequate pain relief (e.g. oral paracetamol).

  - Avoid sharing towels and flannels with household members (although it is very unlikely that the virus would survive on an object long enough to be passed on, it is sensible to take steps to prevent this).

  - Try to avoid identified trigger factors (e.g. ultraviolet light, excess alcohol).

- If self-care measures are not controlling symptoms, prescribe oral aciclovir 200 mg five times a day for 5 days (it is unusual for lesions to still form after 5 days). For future attacks use either:

  - *Episodic* antiviral treatment if attacks are infrequent (e.g. less than six attacks per year). Consider self-initiated treatment, so antiviral medication can be started early in the next attack.

o *Suppressive* antiviral treatment (e.g. oral aciclovir 400 mg twice daily for 6–12 months) if attacks are frequent (e.g. six or more attacks per year), causing psychological distress, or affecting the person's social life:

o After 1 year, stop treatment for a minimum period of two recurrences.

o If attacks are still considered problematic, restart suppressive treatment. If attacks are not considered problematic (off treatment), future attacks can be controlled with episodic antiviral treatment (if needed).

o If the person has breakthrough attacks on suppressive treatment, seek specialist advice.

### Basis for recommendation

These recommendations are based on the British Association for Sexual Health and HIV (BASHH) *2007 national guideline for the management of genital herpes* [BASHH, 2007].

▪ Self-care advice is based primarily on expert opinion [New Zealand Herpes Foundation, 2007; Sen and Barton, 2007], and pragmatic advice based on good clinical practice. CKS identified no controlled trials to support self-care measures in the management of recurrent genital herpes. However, as recurrent episodes are usually mild and self-limiting, self-care alone may be an effective treatment.

▪ Aciclovir, valaciclovir, and famciclovir are licensed for the treatment of recurrent genital herpes [BNF 55, 2008]. The evidence from randomized controlled trials (RCTs) shows that oral antiviral drugs are equally effective at reducing the duration and severity of genital herpes attacks [Jungmann, 2007], and evidence from a meta-analysis shows that, taken prophylactically, they reduce the frequency of attacks compared with placebo [Lebrun-Vignes et al, 2007]. BASHH states that any one of the three antiviral drugs can be used to treat genital herpes. However, CKS believe that oral aciclovir should be prescribed for both *episodic* and certainly *suppressive* treatment based on the cost implications. For example, the cost of one year suppressive treatment with aciclovir is £94.90, valaciclovir is £797.89, and famciclovir is £5419.03 [Prescription Pricing Division, 2008].

▪ Three RCTs provide evidence to suggest that treatment regimens of less than 5 days may be effective, but further research is needed to determine the optimum dose and regimen. The BASHH guideline does provide shorter alternative regimens, using higher doses of antiviral

drugs. CKS recommends aciclovir based on cost, and therefore, does not include these regimens in the recommendation.

- Two RCTs provide evidence, supported by meta-analysis [Lebrun-Vignes et al, 2007], on suppressive treatment, suggesting that most benefit of antiviral medication is derived when treatment is started early, ideally within 6 hours of symptom onset.

- Early controlled trials reported that topical preparations were less effective than oral medication [Corey et al, 1982], and that combination treatment was of no additional benefit.

## How should I treat recurrent genital herpes in someone with HIV?

- People with HIV and recurrent genital herpes can be treated in primary care provided that the infection is uncomplicated and not severe.

- Once the attack has resolved, refer the person to a specialist to optimize antiretroviral treatment.

- Use *episodic* antiviral treatment if attacks are infrequent (e.g. less than six attacks per year).

  - Treat with aciclovir, using a higher dose than people who are not immunocompromised. Treatment may also need to be continued for longer.

  - Prescribe oral aciclovir 400 mg three times a day for 5–10 days.

  - If new lesions are still forming after 3–5 days, seek specialist advice.

- Seek specialist advice about starting *suppressive* antiviral treatment (off-label use) if attacks are frequent (e.g. six or more attacks per year), causing psychological distress, or affecting the person's social or sex life.

  - Treatment is usually with aciclovir 400 twice a day, but the dose may sometimes need to be titrated up to 800 mg two or three times a day.

  - After 1 year, stop treatment for a minimum period of two recurrences.

  - If attacks are still considered problematic, restart suppressive treatment. If attacks are not considered problematic (off-treatment), future attacks can be controlled with episodic antiviral treatment (if needed).

- If the person has breakthrough attacks on suppressive treatment, seek specialist advice.

- Self-care measures may be useful for some people. If appropriate, advise the person to:

- Clean the affected area with plain or salt water to help prevent secondary infection and promote healing of lesions.

- Apply vaseline or a topical anaesthetic (e.g. lidocaine 5%) to lesions to help with painful micturition, if required.

- Increase fluid intake to produce dilute urine (which is less painful to void). Urinate in a bath or with water flowing over the area to reduce stinging.

- Avoid wearing tight clothing, which may irritate lesions.

- Avoid sharing towels and flannels with household members (although it is very unlikely that the virus would survive on an object long enough to be passed on, it is sensible to take steps to prevent this).

- Try to avoid identified trigger factors (e.g. ultraviolet light, excess alcohol).

### Basis for recommendation

These recommendations are based on the British Association for Sexual Health and HIV (BASHH) *2007 national guideline for the management of genital herpes* [BASHH, 2007] and a guide for GPs, practice nurses, and other members of the primary care team published by the Medical Foundation for AIDS & Sexual Health (MedFASH) [Madge et al, 2005].

- Advice to refer people for optimization of antiretroviral treatment is derived from BASHH [BASHH, 2007]. Herpes simplex infections activate HIV replication, and may facilitate onward HIV transmission to sexual partners. Suppressive treatment of herpes simplex virus reduces genital HIV shedding in women. In addition, optimizing antiretroviral treatment (and therefore CD4 count) will also reduce the frequency of clinical recurrences of genital herpes.

- Aciclovir, valaciclovir, and famciclovir are licensed for the treatment of recurrent genital herpes in people with HIV [BNF 55, 2008]. Evidence from two randomized controlled trials (RCTs) shows that oral antiviral drugs are equally effective at reducing the duration and severity of genital herpes attacks in people with HIV. Evidence from other RCTs shows that, taken prophylactically,

valaciclovir reduces the frequency of attacks compared with placebo, and that aciclovir and valaciclovir are equally effective. BASHH states that any one of the three antiviral drugs can be used to treat genital herpes. However, CKS believe that oral aciclovir should be prescribed for both *episodic* and certainly *suppressive* treatment based on the cost implications. For example, the cost of one year suppressive treatment with aciclovir is £94.90 to £130.62, valaciclovir is £1,495.87, and famciclovir is £10,808.98 [Prescription Pricing Division, 2010].

- Self-care advice is based primarily on expert opinion [New Zealand Herpes Foundation, 2007; Sen and Barton, 2007], and pragmatic advice based on good clinical practice. CKS identified no controlled trials to support self-care measures in the management of recurrent genital herpes.

- The recommendations on when to consider stopping or restarting suppressive treatment are extrapolated from the BASHH recommendations regarding this situation in people without HIV [BASHH, 2007].

## What advice should I give a person with recurrent genital herpes?

- Explain how episodes usually last up to 10 days and on average people have 4–5 attacks in the first 2 years. Thereafter, attacks reduce in frequency and severity, but there is no cure for genital herpes at present.

- Reinforce the fact that transmission can occur when there are no symptoms (asymptomatic shedding), but that the risk is higher when symptomatic. Advise the person to:

  - Avoid sex (including orogenital sex) if lesions are present.

  - Use condoms with new or uninfected partners. Explain that condoms cannot completely prevent transmission, due to close skin contact or contact with infected secretions during foreplay.

- Advise people who are concerned about transmitting genital herpes to long-term partners, that:

  - Partners may already be infected even if they do not have symptoms, and should seek advice from a specialist in genito-urinary medicine for screening.

  - Suppressive treatment may reduce the risk of transmission to uninfected partners, but specialist advice is needed.

- Reassure that genital herpes is not hereditary, nor does it increase the risk of cervical cancer or infertility.

- Explain that genital herpes can affect pregnancy, and women should inform a healthcare professional if they become pregnant.

- Provide written information (patient information leaflets) from the Herpes Viruses Association (HVA) at www.hva.org.uk/pil.html or the Family Planning Association www.fpa.org.uk. Offer people further support from the Herpes Viruses Association's helpline 0845 123 2305 (weekdays) or www.herpes.org.uk.

### Additional information

- Provide advice on diagnosis, prognosis, and reducing transmission, and assess psychological impact. Ideally, this information should be given by a healthcare professional experienced in sexual health and should be specific to the person's situation.

### Basis for recommendation

These recommendations are based on expert opinion [New Zealand Herpes Foundation, 2007; Sen and Barton, 2007] and the British Association for Sexual Health and HIV (BASHH) *2007 national guideline for the management of genital herpes* [BASHH, 2007].

- Counselling, follow up, and providing up-to-date information are essential for people with genital herpes, as the condition is chronic, causes considerable distress, and disrupts sexual relationships.

- The cumulative risk of transmission from an infected man to a seronegative woman is about 7% per year. The cumulative risk of transmission from an infected woman to a seronegative man is probably less, at around 3% per year [Mark et al, 2003].

- There is an increased risk of transmission immediately before, and immediately after, a symptomatic episode [Wald, 2004]. However, nearly everyone, both men and women, with HSV type-2 infection sheds viruses at some time without symptoms. Asymptomatic shedding is more frequent with HSV type-2 infection, in the first 12 months after acquiring the infection, and in those with more frequent symptomatic episodes.

▪ Condoms are probably effective in reducing transmission of HSV from men to women, although there is less evidence that they are effective at reducing transmission from women to men [Casper and Wald, 2002]. Effectiveness may be reduced by lack of acceptance, poor compliance, poor technique, and mechanical failure of the condom [Langenberg, 2004].

## When should I suspect sexual abuse of a young person?

▪ Although rare, consider the possibility of sexual abuse in any child or young person with genital herpes, particularly in the following circumstances:

- The child is younger than 13 years of age, unless there is clear evidence of mother-to-child transmission during birth, or of blood contamination.
- The young person is 13 to 15 years of age, unless there is clear evidence of mother-to-child transmission during birth, blood contamination, or that the STI was acquired from consensual sexual activity with a peer.
- The young person is 16 to 17 years of age and there is no clear evidence of blood contamination or that the STI was acquired from consensual sexual activity *and* there is a clear difference in power or mental capacity between the young person and their sexual partner, in particular when the relationship is incestuous or with a person in a position of trust (such as a teacher, sports coach, minister of religion) *or* there is concern that the young person is being exploited.

▪ Follow appropriate child protection procedures and refer to a paediatrician if necessary.

### Basis for recommendation

Suspected sexual abuse

▪ These recommendations are based on guidance from the National Institute of Health and Clinical Excellence [NICE, 2009].

## Prescriptions

For information on contraindications, cautions, drug interactions, and adverse effects, see the electronic Medicines Compendium (eMC) (http://emc.medicines.org.uk), or the British National Formulary (BNF) (www.bnf.org).

### Acute episode: aciclovir for 5 days

### Age from 13 years onwards

**Aciclovir tablets: 200mg five times a day for 5 days**

Aciclovir 200mg tablets
Take one tablet five times a day for 5 days.
Supply 25 tablets.

**Age**: from 13 years onwards
**NHS cost**: £4.01
**Licensed use**: yes

### Acute episode (people with HIV): aciclovir for 5-10 days

#### Age from 13 years onwards

**Aciclovir tablets: 400mg three times a day for 5 days**

Aciclovir 400mg tablets
Take one tablet three times a day for 5 days.
Supply 15 tablets.

**Age**: from 13 years onwards
**NHS cost**: £2.39
**Licensed use**: yes

**Aciclovir tablets: 400mg three times a day for 10 days**

Aciclovir 400mg tablets
Take one tablet three times a day for 10 days.
Supply 30 tablets.

**Age**: from 13 years onwards
**NHS cost**: £4.79
**Licensed use**: yes

### Frequent episodes: suppressive antiviral therapy

#### Age from 13 years onwards

**Aciclovir 400mg twice a day**

Aciclovir 400mg tablets
Take one tablet twice a day.
Supply 56 tablets.

**Age**: from 13 years onwards
**NHS cost**: £8.93
**Licensed use**: yes

### Frequent episodes (people with HIV): suppressive therapy

#### Age from 13 years onwards

**Aciclovir 400mg twice a day**

Aciclovir 400mg tablets
Take one tablet twice a day.
Supply 56 tablets.

**Age**: from 13 years onwards
**NHS cost**: £8.93
**Licensed use**: no - off-label indication

## Analgesia use when required (from 13 years and older)

### Age from 13 years onwards

#### Paracetamol tablets: 500mg to 1g up to four times a day

Paracetamol 500mg tablets
Take one or two tablets every 4 to 6 hours when required for pain relief. Maximum of 8 tablets in 24 hours.
Supply 50 tablets.

**Age**: from 13 years onwards
**NHS cost**: £0.79
**Licensed use**: yes

#### Ibuprofen tablets: 400mg three times a day

Ibuprofen 400mg tablets
Take one tablet three times a day when required for pain relief. Do not exceed the stated dose.
Supply 21 tablets.

**Age**: from 13 years onwards
**NHS cost**: £0.56
**OTC cost**: £0.99
**Licensed use**: yes

#### Codeine 30mg tablets: add on to paracetamol if required

Codeine 30mg tablets
Take one to two tablets every 4 to 6 hours when required for pain relief. Maximum of 8 tablets in 24 hours.
Supply 28 tablets.

**Age**: from 13 years onwards
**NHS cost**: £0.88
**Licensed use**: yes

## Topical anaesthetics

### Age from 13 years onwards

#### Lidocaine 5% ointment

Lidocaine 5% ointment
Apply to the lesions to ease pain. Use 5 minutes before urinating to ease pain associated with passing urine.
Supply 15 grams.

**Age**: from 13 years onwards
**NHS cost**: £0.88
**Licensed use**: yes