NHS Borders
Joint Prescribing Formulary

Dental Prescribing

Black Text	Drugs which may be prescribed by all prescribers
Pink Text	Drugs which are either for specialist only prescription or for specialist initiation, with prescribing transfer to GP

- The guidance in this formulary section is drawn from the following sources
  - Drug Prescribing for Dentistry second edition August 2011) third edition 2016
  - Drug Prescribing for Dentistry third Edition Update June 2021
  - BNF and children's BNF
  - Expert local practice
  - Borders Joint Formulary
- Please refer to "Drug Prescribing for Dentistry" for full prescribing guidance points for dentists. https://www.sdcep.org.uk/

Important Information:

In addition to the disclaimer on NHS Borders website the following information is included confirming that the information contained in NHS Borders Joint Prescribing formulary is drawn from several sources, including BNF & BNF for children, product SPCs, local and national guidelines, local expert opinion, Lothian Joint Formulary and these are all gratefully acknowledged here.

NHS Borders has done its utmost to ensure the information in the BJF is accurate and reliable, but NHS Borders cannot guarantee that the information is complete and accurate. Prescribers are referred to the SPCs, BNF and BNF for children to confirm prescribing information.

June 2022

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Bacterial Infections

- Prolonged courses of antibiotic treatment can encourage the development of drug resistance and therefore the prescribing of antibiotics must be kept to a minimum and used only when there is a clear need.
- Before prescribing antibiotics, refer to the BNF (https://bnf.nice.org.uk/) and 'BNF for Children' (BNFC; https://bnfc.nice.org.uk/) for drug interactions and dose information. Advise patients to space out doses as much as possible throughout the day. Review patients who have received a course of antibiotic treatment.
- Use antibiotics other than those mentioned in this guidance only at the direction of a specialist
- New guidance for increased recommended dosage of phenoxymethylpenicillin and amoxicillin should be obtained from the BNF
- For severe infections the dose of amoxicillin or phenoxymethylpenicillin can be doubled in adults. See BNFC for advice in children.
- Sugar free presentations are available for antibiotic liquids.

Infective Endocarditis

- Previously, in dentistry, antibiotics were prescribed as prophylactics for the prevention of infective endocarditis. However, the National Institute for Health and Clinical Excellence (NICE) has recently produced guidance recommending that antibiotic prophylaxis is not used in patients undergoing dental procedures. This updated advice is now reflected in the BNF. In addition, there is no evidence that prophylaxis is of any benefit in patients with prosthetic joints and it is unacceptable to expose patients to the potential adverse effects of antibiotics in these circumstances.

Dental Abscess

- Dental abscesses are usually infected with viridans Streptococcus spp. or Gram-negative organisms that are penicillin sensitive. Treat dental abscesses in the first instance by using local measures to achieve drainage, with removal of the cause where possible (see below).
- Antibiotics are only indicated in cases of spreading infection (cellulitis, lymph node involvement, swelling) or systemic involvement (fever, malaise).
- If the patient does not respond to the prescribed antibiotic, check diagnosis and consider referral to a specialist.

Local measures (to be used in the first instance)

- If pus is present in dental abscesses, drain by extraction of the tooth or through the root canals.
- If pus is present in any soft tissue, attempt to drain by incision

If drug treatment is required

First Line

Phenoxymethyl-penicillin	250mg tablets; oral solution 125mg/5mg, 250mg/5ml **Adult Dose:** 500mg every 6 hours for 5 days
or, in penicillin allergy,	Phenoxymethylpenicillin , like other penicillins, can result in hypersensitivity reactions, including rashes and anaphylaxis, and can cause diarrhoea. • Do not prescribe Phenoxymethylpenicillin , or other penicillins to patients with a history of anaphylaxis, urticaria or rash immediately after penicillin administration as these individuals are at risk of immediate hypersensitivity.
Metronidazole	Tablets, 400mg, 200mg; oral Suspension, 200mg/5 ml **Adult Dose:** 400mg every 8 hours for 5 days • Advise patient to avoid alcohol (metronidazole has a disulfiram-like reaction with alcohol). • Metronidazole can also be used as an adjunct to amoxicillin in patients with spreading infection or pyrexia. (NB: Both drugs are used in the same doses as when administered alone.)

If a patient has not responded to the first-line antibiotic prescribed, check the diagnosis and either refer the patient or consider speaking to a specialist before prescribing clindamycin or clarithromycin

As the use of broad-spectrum antibiotics, especially co-amoxiclav and clindamycin, can result in *Clostridium difficile* infection, use of these drugs should be restricted to second-line treatment of severe infections only

If patients do not respond to first-line antibiotic treatment, or in cases of severe infection with spreading cellulitis, clindamycin or clarithromycin may be considered as an appropriate second line antibiotic. See Scottish Dental Clinical Effectiveness Programme (SDCEP) Drug Prescribing for Dentistry Clinical Guidance for more information including dosing of second-line antibiotics.

Acute Necrotising Ulcerative Gingivitis and Pericoronitis

Local measures (to be used in the first instance)

- In the case of acute necrotising ulcerative gingivitis, carry out scaling and provide oral hygiene advice.
- In the case of pericoronitis, carry out irrigation and debridement.
- Sodium hypochlorite 1% is used as a root canal irrigant.

If drug treatment is required

An appropriate 3-day regimen is:

Metronidazole **or**	Tablets, 400mg, 200mg, Oral Suspension, 200mg/5 ml • Metronidazole is not licensed for use in children under 1 year
Amoxicillin **and** **Hydrogen Peroxide**	Capsules, 500mg .250mg, oral Suspension, 125mg/5 ml or 250mg/5 ml Mouthwash, 6%. (300ml) **Dose**: Rinse mouth for 2 minutes with 15 ml diluted in half a tumbler of warm water three times daily • Advise patient to spit out mouthwash after rinsing and use until lesions have resolved and patient can carry out good oral hygiene. Hydrogen peroxide mouthwash can be used as a rinse for up to 3 minutes, if required.

Sinusitis

Local measures (to be used in the first instance)

- Advise the patient to use steam inhalation. Do not recommend the use of boiling water for steam inhalation in children.
- Menthol and eucalyptus may be added to the steam inhalation

If drug treatment is required

An appropriate regimen is:

Ephedrine	Nasal Drops, 0.5%. (10 ml). • Not licensed for use in children under 12 years. Refer to BNF. • Use for a maximum of 7 days.

If an antibiotic is required

An appropriate 5-day regimen is a choice of:

Phenoxymethyl-penicillin	250mg tablets; oral solution 125mg/5mg, 250mg/5ml **Adult Dose:** 500mg every 6 hours for 5 days • Phenoxymethylpenicillin , like other penicillins, can result in hypersensitivity reactions, including rashes and anaphylaxis, and can cause diarrhoea. • Do not prescribe Phenoxymethylpenicillin , or other penicillins to patients with a history of anaphylaxis, urticaria or rash immediately after penicillin administration as these individuals are at risk of immediate hypersensitivity.
or, in penicillin allergy **Doxycycline**	Capsules, 100mg Adult dose: 200mg on day 1, then 100mg daily for 5 days treatment in total • Advise patient to swallow capsules whole with plenty of fluid during meals, while sitting or standing. • Not licensed or recommended for use below age 12 because it causes intrinsic staining of developing teeth.

or , in pregnancy and penicillin allergic **Erythromycin**	• Use with caution in patients with hepatic impairment or those receiving potentially hepatotoxic drugs. • Do not prescribe for pregnant women, nursing mothers or children under 12 years, as it can deposit on growing bone and teeth (by binding to calcium) and cause staining and, occasionally, dental hypoplasia. 250mg gastro-resistant tablets Erythromycin ethyl succinate 500mg/5ml oral suspension sugar free Adult Dose: 500mg every 6 hours for 5 days

Fungal Infections

- Superficial fungal infections can be treated in a primary care setting.
- However, chronic hyperplastic candidosis (candidal leukoplakia) is potentially premalignant and therefore refer patients with this condition for specialist treatment.
- Miconazole interacts with many drugs, including warfarin and statins. Sufficient drug is absorbed through topical use for interactions to occur therefore do not give Miconazole to patients taking these drugs.
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Pseudomembranous Candidosis and Erythematous Candidosis

Local measures (to be used in the first instance)

- Advise patients who use a corticosteroid inhaler to rinse their mouth with water or brush their teeth immediately after using the inhaler.

If drug treatment is required

An appropriate 7-day regimen is:

First line	
Nystatin	Oral Suspension, 100,000 units/ml. (30ml) • Advise patient to rinse suspension around mouth and then retain suspension near lesion for 5 minutes before swallowing. Advise patient to continue use for 48 hours after lesions have healed.
Or, second line **Miconazole**	Oromucosal gel sugar free, 20mg/g • Continue for at least 7 days after symptoms resolve • Do not prescribe miconazole for patients taking warfarin or statins

Denture Stomatitis

Local measures (to be used in the first instance)

Advise the patient to:

- clean their dentures thoroughly (by soaking in chlorhexidine mouthwash or sodium hypochlorite for 15 minutes twice daily; note that hypochlorite should only be used for acrylic dentures) and brush their palate daily to treat the condition;
- leave their dentures out as often as possible during the treatment period;
- not wear their dentures at night as a matter of course to prevent recurrence of the problem.

If dentures themselves are identified as contributing to the problem, ensure the dentures are adjusted or new dentures are made to avoid the problem recurring.

If drug treatment is required

An appropriate 7-day regimen is a choice of:

Miconazole **or,**	Oromucosal gel sugar free, 20mg/g • Continue for at least 7 days after symptoms resolve • Do not prescribe miconazole for patients taking warfarin or statins
If Miconazole contraindicated, Nystatin	Oral Suspension, 100,000 units/ml. (30ml) • Advise patient to remove dentures before using drug, rinse suspension around mouth and then retain suspension near lesion for 5 minutes before swallowing. • Advise patient to continue use for 48 hours after lesions have healed.

Angular Cheilitis

- Angular cheilitis in denture-wearing patients is usually caused by infection with Candida spp.
- In those without dentures, angular cheilitis is more likely to be caused by infection with Streptococcus spp. or Staphylococcus spp.
- Miconazole cream is effective against both Candida and Gram-positive cocci

An appropriate regimen is:

Miconazole	Cream, 2%. (20g tube) • Advise patient to continue use for 10 days after lesions have healed. Do not prescribe miconazole for patients taking warfarin or statins.

An appropriate regimen for unresponsive cases is:

Hydrocortisone (1%) and Miconazole (2%)	Cream or ointment. (30g tube) • Advise patient to continue use for a maximum of 7 days. • Do not prescribe miconazole for patients taking warfarin or statins

Viral Infections

Herpes Simplex Infections

Local measures (to be used in the first instance)

- Advise the patient to avoid dehydration and alter their diet (to include soft food and adequate fluids) and use analgesics and a mouthwash.

An appropriate mouthwash is a choice of:

Chlorhexidine **or**	Mouthwash, 0.2%. (300ml) • Advise patient to spit out mouthwash after rinsing and use until lesions have resolved and patient can carry out good oral hygiene. • Chlorhexidine gluconate might be incompatible with some ingredients in toothpaste; advise patient to leave an interval of at least 30 minutes between using mouthwash and toothpaste. Also advise patient that chlorhexidine mouthwash can be diluted 1:1 with water with no loss in efficacy.
Hydrogen Peroxide	Mouthwash, 6%. (300ml) • Advise patient to spit out mouthwash after rinsing and use until lesions have resolved and patient can carry out good oral hygiene. Hydrogen peroxide mouthwash can be used as a rinse for up to 3 minutes, if required.

For infections in immunocompromised patients and severe infections in nonimmunocompromised patients an appropriate 5-day regimen is:

Aciclovir	Tablets, 200mg. Oral Suspension, 200mg/5 ml Adult dose: 200mg five times daily for 5 days • In both adults and children, the dose can be doubled in immunocompromised patients or if absorption is impaired.

Antiviral creams such as aciclovir can be used to treat herpes labialis in nonimmunocompromised patients. Administer these topical agents at the prodromal stage of a herpes labialis lesion to maximise its benefit. An appropriate regimen is:

Aciclovir	Cream, 5%. (2g) • Apply to lesion every 4 hours (five times daily) for 5 days • Aciclovir cream can be applied for up to 10 days, if required.

Varicella-zoster Infections

- In patients with herpes zoster (shingles), start treatment ideally at diagnosis or within 72 hours of the onset of the rash; even after this point antiviral treatment can reduce the severity of post-herpetic neuralgia.
  In addition, refer all patients with herpes zoster to a specialist or their general medical practitioner. Refer immunocompromised patients (both adults and children) with herpes zoster to a specialist or the patient's general medical practitioner for treatment.

For adults an appropriate 7-day regimen is:

Aciclovir	Tablets, 800mg (35 tablets, shingles treatment pack) **Adult dose:** 800mg five times daily

Pain

Odontogenic pain

For mild to moderate odontogenic or post-operative pain, an appropriate 5-day regimen is:

Paracetamol	Tablets, 500mg. Soluble tablets 500mg, oral suspension 120mg/5ml, 250mg/5ml.

For mild to moderate odontogenic, post-operative or inflammatory pain, an appropriate 5-day regimen is:

Ibuprofen	Tablets, 400mg. Oral Suspension, 100 mg/5 ml • In cases where paracetamol or ibuprofen alone is not effective, both paracetamol and ibuprofen can be given alternately (i.e. ibuprofen can be taken first and then paracetamol 2 hours later, and so on, using the normal daily doses given in the prescription boxes above). This regimen controls ongoing pain and pyrexia without exceeding the recommended dose or frequency of administration for either drug.
Diclofenac	Tablets 50mg. • Refer to BNF for contraindications and safety advice • Consider co-prescription of proton pump inhibitor where clinically indicated

Facial pain

- Before treatment, ensure the pain is not odontogenic in nature. Non-odontogenic facial pain can be organic or neurogenic in nature. Most non-odontogenic organic facial pain requires specialist care.

Trigeminal Neuralgia

- If a patient with trigeminal neuralgia presents in primary care, control quickly by treatment with carbamazepine. A positive response confirms the diagnosis. Make an urgent referral to a specialist or the patient's general medical practitioner for a full blood count and liver function tests to monitor for adverse effects, assess the response and titrate the dose.

An appropriate 10-day regimen is:

Carbamazepine	Tablets, 100mg. (20 tablets). **Adult Dose**:100mg twice daily

Mucosal Ulceration and Inflammation

- Mucosal ulceration and inflammation can arise as a result of several different conditions. A diagnosis must be established because the majority of lesions require specific therapy in addition to topical symptomatic therapy. Such specific therapy usually involves specialist care. Temporary relief using topical, symptomatic therapy involves simple mouthwashes, antimicrobial mouthwashes, mechanical protection, local analgesics or topical corticosteroids. Review patient to assess status of ulcers. If ulcers remain unresponsive to treatment refer patients to a specialist. Any ulcer that persists for more than three weeks must be biopsied.

Simple mouthwashes

Local measures (to be used in the first instance)

- Advise the patient to rinse their mouth with a salt solution prepared by dissolving half a teaspoon of salt in a glass of warm water to relieve pain and swelling.
- Alternatively, compound sodium chloride mouthwashes made up with warm water can be prescribed.

An appropriate regimen is:

Sodium Chloride	Mouthwash, Compound. (300ml) • Advise patient to spit out mouthwash after rinsing.

Antimicrobial mouthwashes

- Antimicrobial mouthwashes can reduce secondary infection and are particularly useful when pain limits other oral hygiene measures.

An appropriate regimen is a choice of:

Chlorhexidine **or**	Mouthwash, 0.2%. (300ml) • Advise patient to spit out mouthwash after rinsing and use until lesions have resolved and patient can carry out good oral hygiene. • Chlorhexidine gluconate might be incompatible with some ingredients in toothpaste; advise patient to leave an interval of at least 30 minutes between using mouthwash and toothpaste. Also advise patient that chlorhexidine mouthwash can be diluted 1:1 with water with no loss in efficacy.
Hydrogen Peroxide	Mouthwash, 6%. (300ml). • Advise patient to spit out mouthwash after rinsing and use until lesions have resolved and patient can carry out good oral hygiene. Hydrogen peroxide mouthwash can be used as a rinse for up to 3 minutes, if required

Local analgesics

- Local analgesics cannot relieve pain continuously but are helpful in severe pain (e.g. major aphthae) to enable eating or sleeping.

An appropriate regimen is a choice of:

Benzydamine **or**	Mouthwash, 0.15%. (300ml). Spray, 0.15%. (30ml) • Not recommended for children below 12 years. • Advise patient that benzydamine mouthwash can be diluted with an equal volume of water if stinging occurs. • Advise patient to spit out mouthwash after rinsing. • The mouthwash is usually given for not more than 7 days.
Lidocaine	Ointment, 5%. (15g). Spray 10% • Advise patient to take care with the application to avoid producing anaesthesia of the pharynx before meals as this might lead to choking. • Lidocaine spray, 10%, is not licensed for oral ulceration.

Topical corticosteroids

- Topical corticosteroids can be used to treat mucosal ulceration and inflammation. Carefully control chronic use to prevent systemic effects.
- The choice of preparation depends on the extent and location of the lesions

An appropriate regimen is a choice of:

Betamethasone **or**	Soluble Tablets, 500micrograms. (100 tablets) **Dose**: 1 tablet dissolved in 20 ml water as a mouthwash four times daily • Not appropriate for use in children under12 years. • Advise patient to spit out mouthwash after rinsing. • Betamethasone soluble tablets are not licensed for oral ulceration.
Hydrocortisone Oromucosal	Tablets, 2.5mg.:(20 tablets) • Prescribe only on medical advice in < 12 years

Dry Mouth

Subjective dryness but good saliva volume

Local measures (to be used in the first instance)

- Advise the patient to take frequent sips of cool drinks, suck pieces of ice or sugar-free fruit pastilles, or use sugar-free chewing gum to provide symptomatic relief.

Dry mouth induced by head and neck radiotherapy

- Patients who have a true saliva deficit such as those undergoing head and neck radiotherapy are at high risk from dental caries and opportunistic infections. These patients should use topical fluoride preparations regularly (e.g. fluoride mouthwash, high-fluoride toothpaste) in addition to a saliva substitute or saliva-promoting medication.
- Discourage the use of sugar-containing sweets and drinks but sugar-free chewing gum might be helpful.
- As Saliva Orthana®, Biotène Oralbalance® and Salavix® are not prescribed for children in a dental setting.

An appropriate regimen is a choice of:

Artifical Saliva **or**	Oral Spray (50ml).
Artifical Saliva Gel **or**	Saliva-replacement Gel. (50g). • Avoid use with toothpastes containing detergents (including foaming agents).
Artifical Saliva Pastilles	Pastilles. (50 pastilles)

And a choice of:

Sodium Fluoride **or**	Toothpaste, 0.619% (2800ppm). (75ml) • Not indicated for children under 10 years of age. • Advise patient to avoid rinsing mouth, drinking or eating for 30 minutes after use • Advise patient that this 2800 ppm sodium fluoride toothpaste is a medicine and is only to be used by the person for whom it is prescribed.
Sodium Fluoride	Toothpaste, 1.1% (5000ppm). (51g)

or	• Not indicated for children under 16 years of age. • Advise patient to avoid rinsing mouth, drinking or eating for 30 minutes after use • Advise patient that this 5000 ppm sodium fluoride toothpaste is a medicine and is only to be used by the person for whom it is prescribed.
Sodium Fluoride	Mouthwash, 0.05%. (250ml) • Advise patient to avoid rinsing mouth, drinking or eating for 15 minutes after use.

Dental Caries

- See guidance in SDCEP Drug Prescribing for Dentistry 2016 and Prevention and Management of Dental Caries in Children 2018