Oral and Maxillofacial Surgery - Antibiotic Guideline

Reference no.: CG – MAXFAX/2015/001

The choice of prophylaxis and treatment may be affected by previous culture and sensitive results and MRSA status. Please check before prescribing.

- Intravenous prophylactic antibiotics should be given within the 60 minutes **before** skin incision, ideally at least 10 minutes prior to induction.
- Gentamicin may rarely increase duration of neuromuscular blockade.
  If possible avoid NSAIDS for 24 hrs in patients given gentamicin.
- Whilst teicoplanin can be given as a bolus over 3-5 minutes, giving as an infusion over 30 mins will reduce the risk of infusion related reactions

Procedure/Indication	**1st Line Choice**	**Penicillin allergy** - Non-immediate reaction without systemic involvement	**Penicillin allergy –** immediate rapidly evolving reaction or non-immediate reaction with systemic involvement	**If pt is MRSA positive**	**Comments**
Localised periapical infection	Amoxicillin 500mg TDS and Metronidazole 400mg TDS	Cefaclor 500mg TDS and Metronidazole 400mg TDS	Clindamycin 300mg QDS	d/w a microbiologist	Always try to extract tooth or drain pus. Once tooth is removed there may be no need for antibiotics or may require further antibiotics depending on the clinical situation
Cervicofacial Infection/ spreading infection	Co-amoxiclav 1.2g IV TDS	Cefuroxime 1.5g IV TDS + Metronidazole 500mg TDS IV	Clindamycin 600mg QDS IV	Add IV Teicoplanin or vancomycin and d/w microbiologist	Continue oral antibiotics as above if patient is fit for discharge and some evidence of infection remains, for up to 7 days with review; chase c+s if antibiotics need to change

Procedure/Indication		1st Line Choice	Penicillin allergy - Non-immediate reaction without systemic involvement	Penicillin allergy – immediate rapidly evolving reaction or non-immediate reaction with systemic involvement	If pt is MRSA positive	Comments
Dento-alveolar	**Routine MOS**	No Prophylaxis required	No Prophylaxis required	No Prophylaxis required	No prophylaxis required	For patients on bisphosphonate therapy give a preoperative 0.2% Chlorhexidine rinse
	Complex e.g. cyst enucleation, OAF closure	Amoxicillin 1g and Metronidazole 500mg IV on induction	Cefuroxime 1.5g IV and Metronidazole 500mg IV at induction	Clindamycin 600mg IV on induction	Teicoplanin IV 400mg if < 70kg 800mg if > 70kg and metronidazole IV 500mg on induction	
Fixation of fractures	**No plates/ prosthesis used**	Co-amoxiclav 1.2G on induction	Cefuroxime 1.5g IV and Metronidazole 500mg IV at induction	Clindamycin 600mg IV on induction	Teicoplanin IV 400mg if < 70kg 800mg if > 70kg and metronidazole IV 500mg on induction	If ORIF planned then commence course of co-amoxiclav pre-op. Can continue oral antibiotics for up to 5 days post op in high risk cases only. Most likely this will be on discharge.
	Plates/ prosthesis used.	Co-amoxiclav 1.2g at induction + 2 further post-op doses	Cefuroxime 1.5g IV and Metronidazole 500mg IV at Induction + 2 further post-op doses	Clindamycin 600mg IV on induction + 2 further post-op doses	Teicoplanin IV 400mg if < 70kg 800mg if > 70kg Gentamicin 3mg/kg and Metronidazole 500mg IV at induction. Teic to be repeated 12hrs post op. Metro at 8hrs and 16hrs. No need to repeat Gent.	
Orthognathic Surgery		Co-amoxiclav 1.2g IV at induction + 2 further post-op doses	Cefuroxime 1.5g IV and Metronidazole 500mg IV at induction + 2 further post-op doses	Clindamycin 600mg IV on induction + 2 further post-op doses	As above	Can continue oral antibiotics for up to 5 days post op **in high risk cases**
Skin/Mucosal Laceration (If infected/ at risk)		Co-amoxiclav 625mg tds Check Tetanus Status	Cefaclor 500mg TDS and Metronidazole 400mg TDS Check Tetanus Status	Clarithromycin 500mg BD and Metronidazole 400mg TDS Check Tetanus Status	Linezolid 600mg bd plus metronidazole 400mg tds	If wound is clean, without risk factors, then no need to prescribe antibiotics
Head and neck resections including free flap surgery		Co-amoxiclav 1.2g IV at induction + 2 further post-op doses	Cefuroxime 1.5g IV and Metronidazole 500mg IV at induction + 2 further post-op doses	Teicoplanin 400mg if < 70kg 800mg if > 70kg Gentamicin 3mg/kg and Metronidazole 500mg IV at induction. Repeat teic 12hrs post op. Metro at 8hrs and 16hrs. No need to repeat Gent.	Teicoplanin IV 400mg if < 70kg 800mg if > 70kg Gentamicin 3mg/kg and Metronidazole 500mg IV at induction. Repeat teic 12hrs post op. Metro at 8hrs and 16hrs. No need to repeat Gent.	In higher risk cases e.g.salvage surgery, diabetes,hard and soft tissue flaps,previous RT, large resection, give for 48 hrs

Procedure/Indication		1st Line Choice	Penicillin allergy - Non-immediate reaction without systemic involvement	Penicillin allergy – immediate rapidly evolving reaction or non-immediate reaction with systemic involvement	If pt is MRSA positive	Comments
TMJ Surgery	**No prosthesis**	Cefuroxime 1.5g IV on induction	Cefuroxime 1.5g IV on induction	Clindamycin 600mg IV on induction	Teicoplanin IV 400mg if < 70kg 800mg if > 70kg	
	Prosthesis placed	Cefuroxime 1.5g IV and Metronidazole 500mg IV + 2 further post-op doses	Cefuroxime 1.5g IV and Metronidazole 500mg IV + 2 further post-op doses	Teicoplanin 400mg if < 70kg 800mg if > 70kg Gentamicin 3mg/kg and Metronidazole 500mg IV at induction Teic to be repeated at 12hrs post op. Metro at 8hrs and 16hrs. No need to repeat Gent	Teicoplanin IV 400mg if < 70kg 800mg if > 70kg Gentamicin 3mg/kg and Metronidazole 500mg IV at induction. Teic to be repeated 12hrs post op. Metro at 8hrs and 16hrs. No need to repeat Gent.	Can use topical antibiotics for joint replacements- Consultant decision. **Immediate post-op along incision margin**

Doses may need to be altered in cases of hepatic or renal impairment. If there is doubt regarding the suitability of a regime then discuss with the on-call pharmacist. Wherever possible, specimen cultures should be used to guide antibiotic use.

Ultimately clinical judgment must be taken into consideration, especially when prescribing prophylactic antibiotics, as literature can be conflicting.

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