

SUPPLEMENTAL MATERIAL

Antibiotic Treatment for Pneumonia Complicating Stroke: Recommendations From The Pneumonia in Stroke Consensus (PISCES) Group

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Online Only Table I: Search terms

Subject Search in MESH: exp *Cerebrovascular disorders/; exp *Pneumonia/;exp*antibiotic agent
[Limit to: Publication Year 1946-2018]

Stroke*,Pneumonia*, “respiratory tract infection*”,
“chest infection*”“antibiotic treatment*”, antibiotic*,
“anti-infective agent*”, “anti-microbial*”, penicillin*,
Amoxicillin*, cephalosporin* , monobactam*,
carbapenem*, macrolide*, tetracycline*,
fluoroquinolone*, Metronidazole*, aminoglycoside*,
Doxycycline*,Clarithromycin*, Vancomycin*,
Levofloxacin*, Ciprofloxacin*,Linezolid*
[Limit to: Publication Year 1946-2018]

Subject Search on EMTREE: exp *Cerebrovascular disease/ exp *Pneumonia/; * exp antiinfective agent
[Limit to: Publication Year 1901-2018]

Stroke*, Pneumonia*, “respiratory tract infection*”,
“chest infection*”, “antibiotic treatment*”, antibiotic*,
“anti-infective agent*”, “anti-microbial*”, penicillin*,
Amoxicillin*, cephalosporin* , monobactam*,
carbapenem*, macrolide*, tetracycline*,
fluoroquinolone*, Metronidazole*, aminoglycoside*,
Doxycycline*,Clarithromycin*,
Vancomycin*Levofloxacin*, Ciprofloxacin*,
Linezolid*
[Limit to: Publication Year 1901-2018]

[Limit to: Publication Year 1980-2016]

All text: “stroke” , “pneumonia” , “antibiotic treatment”

Publication Year from 1980 to 2018, in Cochrane Reviews (Protocols only), Trials and Methods Studies (Word variations have been searched)

Online Only Table II: Eligibility criteria

Inclusion criteria

Age \geq 18years

Fully published studies or abstracts

English or non-English language

Inpatients with ischemic stroke, intracerebral haemorrhage, or both

Randomized and other controlled trials, including cluster RCTs, controlled (non-randomized) clinical trials (CCTs) or cluster trials, prospective comparative cohort studies, retrospective observational studies, case-control or nested case-control studies.

Incidence or prevalence of pneumonia following admission with stroke reported

Antibiotic s used to treat pneumonia complicating stroke identified and treatment outcomes measured

Exclusion criteria

Age<18years

Exclusively intubated and mechanically ventilated patients

Exclusively pneumonia preceding index stroke

Case reports

Online Only Table III: Summary of consensus statements and process

	Preliminary Consensus (%)	Final Consensus (%)
Is there a clinical need for an antibiotic treatment guideline specifically for pneumonia complicating stroke?		
Yes	100	100
No	0	0
If yes, the antibiotic treatment guideline for pneumonia complicating stroke should be applied to which of the following?		
Pneumonia occurring as an inpatient at any time point after stroke	27	0
Pneumonia within 7 days after admission with stroke (Stroke associated pneumonia, SAP)	87	100
Pneumonia in patients with known or strongly suspected of aspiration (e.g. witnessed vomiting, nil-by-mouth)	40	40
Recurrent pneumonia during admission (e.g. in tube fed patients)	7	0
Patients developing pneumonia while mechanically ventilated	7	0
Do you think the bacterial etiology of pneumonia complicating stroke has some overlap with (can choose more than 1):		
Hospital acquired pneumonia (HAP)	87	75
Community acquired pneumonia (CAP)	67	75
Ventilator-associated pneumonia (VAP)	53	0
None of the above	0	0
Should empirical treatment of pneumonia complicating stroke cover (can choose more than one):		
Gram positive cocci (e.g. <i>Staphylococcus aureus</i> , <i>Streptococcus pneumoniae</i> etc)?	73	75
Coliforms (e.g. <i>Escherichia coli</i> , <i>Klebsiella spp</i>)?	60	75
Pseudomonas species	7	75
None of the above	0	0
All of the above	34	100
Other	27	
Is there sufficient evidence to currently justify empirical recommendation of one particular antibiotic class (or dual therapy) over another for (can choose more than one):		
Pneumonia complicating stroke at any time after admission?	20	0
Stroke associated pneumonia	27	0
Pneumonia in patients with known or strongly suspected aspiration (e.g. witnessed vomiting, nil-by-mouth secondary to dysphagia)?	20	0
Recurrent pneumonia during admission after stroke?	0	0
None of the above	67	100
Is a randomized trial comparing different empirical antibiotics for suspected or confirmed SAP justified?		
Yes	80	100
No	20	0

Online only Table IV: Excluded studies from systematic literature search

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