Appendix 7: Studies of lower respiratory tract microbiology in adult bronchiectasis patients

Date	Ref	Country	N	Age[1]	Method	Hi	Pa	Sa	Sp	Mc	Anaer	GnNF	Spy	Asp	Myco	Non-pathogenic[2]	No Growth
1992	[1]	Hong Kong	91	50	Sputum	N/D	N/D	N/D	N/D	N/D	N/D		N/D	N/D	13%[3]	N/D	
1995	[2]	USA	123	57	Sputum	30%	31%	7%	11%	2%	2%			5%	23%[4]	23%	
1996	[3]	UK	135	-	Sputum	N/D	12%	N/D	N/D	N/D	N/D			N/D	N/D	N/D	N/D
1997	[4]	UK	152	-	Sputum	11%	15%	3%	4%	3%	N/D	3%	N/D	N/D	N/D	N/D	22%
1997	[5]	Spain	17	57	BAL	35%	5%				N/D				N/D	60%	23%
1998	[6]	Hong Kong	100	57	Sputum	10%	33%	5%	6%	2%		5%			3%	35%	
2000	[7]	UK	150	53	Sputum	35%	31%	14%	13%	20%	N/D			2%	N/D	5%	
2001	[8]	Spain	49	57	BAL	26%	20%		2%		N/D				N/D	28%	
2002	[9]	Thailand	50	58	Sputum	14%	20%		6%	4%	N/D				6%[5]	36%	
2002	[10]	Spain	42	58	Sputum	26%	9%		14%	5%	N/D			2%	0%	60%	
2002	[10]	Spain	59	58	BAL	32%	10%	3%	7%		N/D				0%	32%	
2007	[11]	Australia	89	57	Sputum	47%	12%	4%	7%	8%	N/D	3%		2%	2%	21%	
2008	[12]	Australia	61	42	Sputum	62%	20%	7%	15%	5%	N/D	20%		N/D	2%	23%	
2009	[13]	UK	141	67	Sputum	20%	19%	2%	6%	4%	N/D	2%		N/D	N/D	44%	
2011	[14]	Turkey	50	51	Sputum	10%	21%		5%	3%							63%
2012	[15]	New Zealand	141	60	Sputum	28%	12%	3%	3%	4%	N/D	N/D	N/D	N/D	N/D	50%	
2014	[16]	Belgium	245	68	Sputum	19%	8%	14%	15%	8%	N/D	7%		11%	N/D	N/D	N/D
2014	[17]	Spain	819	59	Sputum	15%	32%	5%	N/D	N/D	N/D	5%	N/D	22%[7]	3%	N/R	N/R
2014	[18]	UK	608	67	Sputum	29%	12%	7%	6%	10%	N?D	7%	N/D	N/D	Excluded	28%	
2015	[19]	UK and Spain	50	65	Sputum	20%	20%	6%		6%		10%				40%	
2015	[20]	UK	81	63	BAL	23%	5%	12%	8%	1%	N/D	6%		1%	ND	49%	
2015	[21]	China	144	45	Sputum	10%	31%	2%	N/D	N/D	N/D	7%		N/D	N/D	40%	
2015	[22]	UK	155	61	Sputum[8]	57%	49%	20%	33%	25%	N/D	Not calculable		10%	3%	N/R	

Exclusions: studies that were selective e.g studies of only positive cultures or only including P.aeruginosa or NTM patients; studies that did not report a full range of pathogens.

1 mean or median age in adult series
2 Non-pathogenic: non-pathogenic organisms such as Corynaebacterium, Neisseria spp, coagulase negative Staphylococcus, ß-haemolytic Streptococcus
3 11% M. tuberculosis, 2% M. avium, 1% M. chelonae
4 17% M. avium intracellulare
5 M. kansasii 4%, M.c chelonae 2%
7 includes other fungi
8 Includes positive cultures over time only.
Anaer, anaerobe; Asp, Aspergillus; BAL, bronchoalverolar lavage; Hi, Haemophilus influenza; Mc, Moraxella catarrhalis; Myco, mycobacteria; N/D, not done; Pa, Pseudomas aeruginosa; Sa, Staphylocccus pnemoniae; Spy, Streptococcus pyogenes, GnNF= Gram-negative non-fermenters

Appendix 7 (*Continued*)

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