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**Title:** RCT of chest physiotherapy versus chest physiotherapy and pulmonary rehabilitation in non cystic fibrosis bronchiectasis

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**Body:** Aim To assess the efficacy of pulmonary rehabilitation(PR) in addition to regular chest physiotherapy in non-cystic fibrosis bronchiectasis. Methods Patients with bronchiectasis were invited to participate if their exercise tolerance was limited, due to bronchiectasis, from Edinburgh Bronchiectasis clinic, in a prospective study. 15 received chest physiotherapy and 15 received PR+chest physiotherapy. Review was at baseline/4 weeks/8weeks(end of intervention)and 20 weeks(completion of study). Outcome measures were improvement in incremental shuttle walking test(ISWT), endurance walk test(EWT), health related quality of life(HRQoL)-St.Georges Questionnaire(SGRQ) and Leicester Cough Questionnaire(LCQ). Results Results are presented as mean(standard error). The minimum clinically important difference(MCID) for SGRQ and LCQ was 4 and 1.3 units respectively. Comparison of changes between the 2 groups was calculated using unpaired t-tests.

	Acapella only			Acapella+PR		
	Baseline	8weeks	20weeks	Baseline	8weeks	20weeks
ISWT(m)	343.33(44.35)	338.66(42.24)	343.33(39.74)	287.5(50.64)	344.16(115.52)*	367.5(61.51)**
EWT(m)	970.67(143.69)	946.67(161.55)	990.67(156.57)	1102.5(116.24)	1295.83(65.84)***	1350(72.56)
SGRQ(Units)	40.56(3.92)	39.15(4.47)	45.2(4.48)	38.53 (6.42)	30.55(6.63)§	34.65(7.71)§
LCQ(Units)	40.56(3.92)	14.64(1.38)	13.62(1.37)	12.31(2.34)	14.9(2.3)§	16.67(1.82)§

Table 1. p values represent differences between 2 groups (using unpaired t tests), at time points indicated.

\*p=0.03; \*\*p=0.04; \*\*\*p=0.02; §p<0.001

Conclusion PR in addition to regular chest physiotherapy, improves exercise tolerance and HRQoL in bronchiectasis and the benefit was sustained at 3months post end of PR.