European Respiratory Society
Annual Congress 2013

Title: A simplified CT scoring system in non cystic fibrosis bronchiectasis

Dr. Pallavi 29488 Mandal pallavimandal@gmail.com MD [1], Dr. Dilip 29489 Patel dilip.patel@nhslothian.scot.nhs.uk MD [2] and Dr. Adam 29490 Hill adam.hill318@nhs.net MD [1,3]. [1] MRC Centre for Inflammation Research, Queen's Medical Research Institute, Edinburgh, United Kingdom, EH16 4TJ ; [2] Department of Radiology, Royal Infirmary of Edinburgh, Edinburgh, United Kingdom, EH16 4SA and [3] Department of Respiratory Medicine, Royal Infirmary of Edinburgh, Edinburgh, United Kingdom, EH16 4SA .

Body: Introduction The currently used CT scoring system in bronchiectasis is the Bhalla score, which had been designed for scoring CT scans in cystic fibrosis. This however is too detailed for use in clinical practice. Aim The aim of this study was to compare the simplified modified Reiff score to the more detailed Bhalla score in patients with non cystic fibrosis bronchiectasis. Methods 93 consecutive HRCTs were assessed. Bhalla score was calculated. The modified Reiff score used (0-18) was based on the number of lobes (max 6 including lingula) and the severity of bronchial dilatation in comparison to the adjacent vessel (0=no bronchiectasis; 1= 1-2 times; 2= 2-3 times; 3= >three times). These scores were jointly carried out by consensus between a chest physician and radiologist blinded to the clinical status of the patient. Both scores were correlated with sputum microbiology (growth of Pseudomonas aeruginosa, MRSA or enteric gram negative organisms) and FEV1 % predicted results. Result Median FEV1 % predicted was 75% (57.7-94.3%). 35% were colonized with Pseudomonas aeruginosa, MRSA or enteric gram-negative organisms; 43% with other potentially pathogenic microorganisms and 23% with mixed normal flora. Modified Reiff Score correlated well with the Bhalla score (r2= 0.9, p<0.001)

Table 1.

	Correlation of Modified Reiff Score with Bhalla score r2	P value
PA/ MRSA/ Enteric Gram negative	0.8	<0.0001
Other potentially pathogenic microorganism	0.8	<0.0001
FEV1 <50% predicted	0.8	0.0024
FEV1 >50% predicted	0.8	<0.0001

Correlation of Bhalla and Modified Reiff score.

Conclusion Simplified modified Reiff score correlate well with the more complicated Bhalla score and will be easier for clinicians to use in clinical practice.