



Randomized Clinical Trial of Endobronchial Ultrasound Needle Biopsy With and Without Aspiration

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e-Appendix 1.

Background blood or clot	Large amount, great compromise to diagnosis	0
	Moderate amount, diagnosis possible	1
	Minimal, diagnosis easy; "textbook" quality	2
Amount of cellular material	Minimal to absent, diagnosis not possible	0
	Sufficient for cytodiagnosis	1
	Abundant, diagnosis simple	2
Degree of cellular degeneration	Marked, diagnosis impossible	0
	Moderate, diagnosis possible	1
	Minimal, good preservation, diagnosis easy	2
Degree of cellular trauma	Marked, diagnosis not possible	0
	Moderate, diagnosis possible	1
	Minimal, diagnosis obvious	2
Retention of appropriate architecture	Minimal to absent, nondiagnostic	0
	Moderate, some preservation,	1
	Excellent, diagnosis obvious	2
Total Mair's Score	Poor (0 - 2) Good (3-6) Superior (7-10)	

Mair, S., et al., *Fine needle cytology--is aspiration suction necessary? A study of 100 masses in various sites.* Acta Cytol, 1989. 33(6): p. 809-13.

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Concordance between EBUS-TBNA and EBUS-TBNCS in sample adequacy, diagnosis and quality for lymph nodes equal or smaller than 1 cm in short axis (n=73).

Transbronchial Needle Capillary Sampling						
Transbronchial Needle Aspiration	Adequate Sample (%)	Yes	Yes	No	Concordance (95 CI) 82.2 (71.5-90.2)	
		Yes	58 (79)	6 (8)		
		No	7 (10)	2 (3)		
	Diagnostic Sample (%)	Yes	Yes	No	Concordance (95 CI) 98.6 (92.6-100)	
		Yes	13 (18)	1 (1)		
		No	0 (0)	59 (81)		
	Malignancy (%)	Yes	Yes	No	Concordance (95 CI) 98.6 (92.6-100)	
		Yes	10 (14)	1 (1)		
		No	0 (0)	62 (85)		
	Sample Quality (%)	Poor Good Superior	Poor	Good	Superior	Concordance (95 CI) 82.2 (71.5-90.2)
			0 (0)	0 (0)	0 (0)	
			0 (0)	3 (4)	7 (10)	
			0 (0)	6 (8)	57 (78)	

Concordance between EBUS-TBNA and EBUS-TBNCS in sample adequacy, diagnosis and quality for lymph nodes larger than 1 cm in short axis (n=119).

Transbronchial Needle Capillary Sampling						
Transbronchial Needle Aspiration	Adequate Sample (%)	Yes	Yes	No	Concordance (95 CI) 84.9 (77.2-90.8)	
		Yes	95 (80)	10 (8)		
		No	8 (7)	6 (5)		
	Diagnostic Sample (%)	Yes	Yes	No	Concordance (95 CI) 94.1 (88.3-97.6)	
		Yes	50 (42)	5 (4)		
		No	2 (2)	62 (52)		
	Malignancy (%)	Yes	Yes	No	Concordance (95 CI) 97.5 (92.8-99.5)	
		Yes	39 (33)	0 (0)		
		No	0 (0)	80 (67)		
	Sample Quality (%)	Poor Good Superior	Poor	Good	Superior	Concordance (95 CI) 84 (76.2-90.1)
			0 (0)	0 (0)	0 (0)	
			0 (0)	5 (4)	10 (8)	
			0 (0)	9 (8)	95 (80)	

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