

Table E-1 Summary of the published reports on the diagnostic accuracy of the commonly used tests for impingement syndrome

Study	Diagnosis	Diagnostic test	Sensitivity (%)	Specificity (%)	PPV* (%)	NPV [†] (%)	DA [‡] (%)
Leroux et al. ⁶ (1995)	Impingement syndrome	Neer	89				
		Hawkins-Kennedy	87				
		Yocum	78				
Calis et al. ³ (2000)	Impingement syndrome	Neer	88.7	30.5	75.9	52.3	72
		Hawkins-Kennedy	92.1	25	75.2	56.2	72.8
		Horizontal adduction	82	27.7	73.7	38.4	66.4
		Speed	68.5	55.5	79.2	41.6	64.8
		Yergason	37	86.1	86.8	35.6	51.2
		Painful arc	32.5	80.5	80.5	32.5	46.4
		Drop arm	7.8	97.2	87.5	29.9	33.6
MacDonald et al. ⁸ (2000)	Bursitis	Neer	75	47.5	36	82.9	
		Hawkins-Kennedy	91.7	44.3	39.3	93.1	
		Neer or Hawkins-Kennedy	95.8	41	39	96	
		Neer and Hawkins-Kennedy	70.8	50.8	36.2	81.6	
	Rotator cuff pathosis	Neer	83.3	50.8	40	88.6	
		Hawkins-Kennedy	87.5	42.6	37.5	89.7	
		Neer or Hawkins-Kennedy	87.5	37.7	35.6	88.5	
		Neer and Hawkins-Kennedy	83.3	55.7	42.6	55.7	
	Bursitis or Rotator cuff tear	Neer	77.0	62.5	70.0	71.4	
		Hawkins-Kennedy	88.9	60.0	71.4	82.8	
Naredo et al. ¹⁶ (2002)	Supraspinatus lesion	Physical examination	79.3	50	95.8	14.2	
	Supraspinatus tendonitis	Physical examination	72.2	38.4	61.9	50.0	
	Supraspinatus tear	Physical examination	18.7	100	100	53.5	
	Infraspinatus lesion	Physical examination	70.5	90	85.7	70.5	
	Infraspinatus tendonitis	Physical examination	57.1	70.8	36.3	85	
	Infraspinatus tear	Physical examination	36.3	95	80	73	
	Subscapularis lesion	Physical examination	50	84.2	66.6	72.7	
	Subscapularis tendonitis	Physical examination	50	88	50	88	
	Subscapularis tear	Physical examination	50	95.4	75	87.5	
	Biceps tendonitis	Physical examination	73.6	58.3	73.6	58.3	
	Subacromial-subdeltoid bursitis	Physical examination	42.8	88.2	75	65.2	
	ACCL [§] involvement	Physical examination	58.3	85.7	93.3	37.5	
	Impingement	Physical examination	65	72.7	81.2	53.3	
Holtby and Razmjou ¹⁷ (2004)	Supraspinatus tendinitis or partial rotator cuff tear	Supraspinatus test	62	54			
	Full thickness cuff tear		41	70			
	Large to massive cuff tear		88	70			

*PPV = positive predictive value; [†]NPV = negative predictive value; [‡]DA = diagnostic accuracy [§]ACCL = acromioclavicular.