Sensitivity, specificity, and predictive value of ultrasonography using plain magnetic resonance imaging as the gold standard in subscapularis tendon injuries.

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INTRODUCTION:

The rupture of the rotator cuff components is one of the most frequent causes of musculoskeletal pain and disability. In the literature there are few studies referring to the diagnosis specifically of the subscapularis tendon, the use of echosonography and its importance in the use of this pathology.

METHODS:

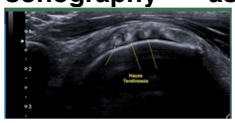
We carried out an ambipecstive, comparative and descriptive study. The universe was made up of 203 patients, of which 87 suffered from the pathology in question and 44 met the inclusion criteria.

RESULTS:

Of 44 cases that correspond to 56% of the universe of analysis, 61.36% were positive in both nuclear magnetic resonance as in sonography. The sensitivity of the ultrasound study of the subscapularis tendon injury in painful shoulder pathology was 95.45% and the specificity was 69.57%.

DISCUSSION AND CONCLUSION:

The ability of echosonography to detect sick symptomatic patients is represented by the positive predictive value, which turned out to be 75%. This is reliable and showed that it can be used to identify patients who do not have tendon injury and this is represented in the negative predictive value with 94.12%. The validity index of sonography as a diagnostic method in subscapularis tendon injuries is 82.22%.



GROUPS	FRECUENCY	PERCENTAGE
TRUE POSITIVES	27	61%
TRUE NEGATIVES	11	25%
FALSE NEGATIVES	4	9.09 %
FALSE POSITIVES	2	4.5%

ASSOCIATED INJURIES	FRECUENCY	PERCENTAGE
SUPRASPINATUS	42	95%
LONG HEAD BICEPS BRACHII	29	66%
CALCIFICATION	12	27%
INFRASPINATUS	3	7%
INSTABILITY	3	7%

ETIOLOGY	FRECUENCY	PERCENTAGE
DEGENERATIVE	28	63,6
TRAUMATIC	13	29,5
INFLAMATORY	3	6,8
TOTAL	44	100

VALUE	LOWER	IC (95%)	UPPER LIMIT
SENSITIVITY(%)	95,45	93,13	97,78
ESPECIFICITY (%)	69,57	67,28	71,85
VALIDITY INDEX (%)	82,22	81,04	83,4
ITIVE PREDICTIVE VALUE	75	73,12	76,88
ATIVE PREDICTIVE VALUE	94,12	91,11	97,13