Interobserver reliability of bigliani method refined by epstein for acromial morphology classification

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Introduction: For a classification system to be clinically useful, it must satisfy certain criteria. First, the same observer must be able to repeat the same classification each time the data are reviewed (intraobserver reliability). Second, diferent observers must be able to agree on the same classification when reviewing the same data (interobserver reliability). After these criteria are met, then the classification system can be tested to see how accurate is in predicting treatment options or patients outcome. The aim of this study was to evaluate the interobserver reliability of the Bigliani method refined by Epstein for the acromial morphology classification. Methods and results: We studied 20 healthy adults of both gender between 21 and 25 years old without shoulder's joint actual or previous use in sport and/or professional activity. The radiographic incidence used was the supraspinatus outlet view. The acromion morphology was classified by the Bigliani/Epstein method (type I - flat, type II - curved, type III - hooked). Three observers performed this classification. The reliability between observers was evaluated by the McNemar test and the Kappa index. Our results showed a p > 0.05 for the McNemar test and a Kappa index > 0.70 (p < 0.05). Conclusion: The Bigliani method refined by Epstein showed agreement for all observers, confirming the good reprodutibility of this method for our three observers.

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