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PERSPECTIVE

SLAP lesion: what is it...really?

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Diagnostic arthroscopy has long been considered the gold standard for assessment of superior labrum anterior posterior (SLAP) tears. The most widely used classification system for these lesions was described by Snyder et. al. in 1990 [1]. However, until recently, no studies had ever evaluated the interobserver and intraobserver variability amongst orthopedic surgeons using the Snyder classification in order to make a diagnosis and determine treatment of these tears. We recently conducted a study to assess the interobserver and intraobserver variability of experienced shoulder arthroscopists in the evaluation of SLAP tears. In our study design, we sent a CD with 23 brief video vignettes to more than 300 members of the Arthroscopy Association of North America, the American Shoulder and Elbow Society, and the American Orthopedic Society for Sports Medicine. Each of these surgeons were asked to view the vignettes and make a diagnosis according to the Snyder classification and recommend a treatment based on this classification in addition to various demographic data on their level of experience, case volume, and fellowship training. Seventy-three surgeons responded with completed surveys. The membership of these organizations included several prominent European shoulder surgeons.

Overall, we found that the interobserver variability amongst experienced arthroscopists was considerable and the analysis of intraobserver variability showed only moderate agreement for both diagnosis and treatment. The results also showed that shoulder arthroscopists had difficulty distinguishing normal shoulders from Types I and II SLAP tears and less than half of surgeons agreed on the diagnosis and treatment of Types II and III lesions respectively. We concluded that the Snyder classification is not helpful for guiding diagnosis and treatment of Types II and III lesions.

The implications of these findings are profound. Many previous studies on the predictive value of physician examination maneuvers and diagnostic imaging such as MRI have already demonstrated variability and lack of reproducibility. Thus, diagnostic arthroscopy has been designated as the gold standard in determining whether or not a SLAP lesion is present. Our data clearly demonstrate that there is a real concern about the accuracy of arthroscopic determination of SLAP lesions.

Another important conclusion from our observation of variable interobserver and intraobserver determination of pathology of SLAP lesions is that the Snyder classification for SLAP lesions is not reproducible. A key observation from our study was that interobserver variability was markedly improved (in fact, "good") when the diagnosis was made based on what treatment the surgeon would recommend for any given lesion. In short, surgeons agreed on the diagnosis when they were asked about how they would treat these lesions. This thought process is the "reverse" of what the Snyder classification proposes: make the diagnosis in order to guide the treatment. So, in the end, accurate determination of superior labrum pathology may not be possible based on arthroscopy; however, when a lesion is encountered that seems to require surgical repair, surgeons probably make the correct decision even if they cannot accurately classify the type of superior labrum pathology.

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