Certified Athletic Trainer’s Perceived Comfort Level with Shoulder Reductions

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Jessica J. Pearson and Michael S. Weller, MS, ATC

INTRODUCTION
This study addressed several factors that influence the ability and willingness of certified athletic trainers to reduce a shoulder dislocation. The study determined the ATC’s attitudes toward shoulder reductions, where shoulder reductions are taking place, how ATC’s are reducing shoulder reductions, and how ATC’s are assessing their training for shoulder reductions. Much research has been done on shoulder dislocations and the techniques to reduce them, but there is minimal research that proves that ATC’s are actually reducing shoulder dislocations. The research question the study evaluated was, “What is the perceived comfort level of athletic trainers in reducing a shoulder dislocation?” One of the purposes of the study was to observe factors that influence ATC’s comfort level with reducing a shoulder dislocation. These factors could be either extrinsic or intrinsic. Extrinsic factors include leadership and support by the team physician. This refers to whether or not shoulder reductions are on the ATC’s list of standard operating procedures. The intrinsic factors that were assessed included level of education and training. Training refers to where they learned the reduction technique (Figures 3 & 4). Some potential answers included undergraduate or graduate studies, formal or informal instruction with the team physician, on-the-job training, and personal experience. The hypothesis for this study was that ATC’s in the collegiate and professional setting would have a greater perceived comfort level with reducing a shoulder dislocation than ATC’s working in a high school or clinic setting. Also, it was predicted that ATC’s with more years of clinical experience would have a greater perceived comfort level.

METHODS
This study was done via an online survey on Qualtrics.com. The survey included demographic information, and both qualitative and quantitative data (see Survey). The qualitative questions focused on open-ended questions that asked about previous experiences with shoulder dislocations and their personal opinions on the issue. The quantitative section asked questions pertaining to what state and clinical setting they currently practice in (Figures 1 & 2).

Participants were Certified Athletic Trainers recruited from District IV of the National Athletic Trainer’s Association. The participants were recruited from all settings, including high schools, professional and collegiate sports, and other institutional environments. The ATC’s received an email asking them to participate in the study and link to the actual survey on Qualtrics. A reminder email was also sent out three weeks after the original email. If they chose to proceed to Qualtrics, they were directed to the Informed Consent form. Before the participants proceeded to the actual survey, they were required to indicate that they understood the procedure and voluntarily consented to the study. After the participants chose to continue with the study, the survey was completed in one setting and should not have taken more than 15 minutes.

RESULTS
Once the data had been collected, the data analysis was done separately for quantitative and qualitative data. The quantitative data was analyzed using the Statistical Package for the Social Sciences (SPSS). Using SPSS, the data was analyzed using the AMOS9 and Tableau Post-Proc tests. The p-value was set at 0.05. These tests compared both years of experience and current clinical setting to the comfort level of Certified Athletic Trainers in reducing anterior, posterior, and inferior dislocations. The qualitative data was analyzed for common themes and ideas.

The results showed that there was a significant difference between ATC’s perceived comfort level in the 0-5 and 20+ years of experience groups when reducing posterior dislocations (p < 0.01). Another significant difference was shown between the ATC’s in a collegiate and clinical setting (p = 0.019). These groups disagreed on whether or not ATC’s in their setting should be permitted to reduce shoulder dislocations. The qualitative data was analyzed for common themes and ideas. The most common theme that emerged was that ATC’s do not want to reduce shoulder dislocations due to potential liability. This finding was very evident in the high school setting. Another common theme that was identified included the belief that ATC’s should be permitted to reduce chronic dislocations, but not acute, first-time dislocations. This belief was shared across all groups.

DISCUSSION
This study shows that Certified Athletic Trainers are performing shoulder reductions and that the more experience they gain, the more confident and comfortable they feel. In the future, this study could go on to investigate which reduction techniques are most commonly used by certified athletic trainers. Further research could also look at how physicians perceive the comfort level of athletic trainers with shoulder reductions.

CONCLUSION
This study shows that Certified Athletic Trainers are performing shoulder reductions and that the more experience they gain, the more confident and comfortable they feel. In the future, this study could go on to investigate which reduction techniques are most commonly used by certified athletic trainers. Further research could also look at how physicians perceive the comfort level of athletic trainers with shoulder reductions.