

Improving Awareness of Surgical Ergonomics in Gynecologic Surgery **Dominic Cammarano DO, Priyanka Raju MD, Annika Eveland MD**

Introduction: Ergonomics are important in preventing work-related injuries especially among gynecologic surgeons who spend hours in the operating room, however there is often a lack of education or awareness of proper surgical ergonomics. The purpose of this project was to improve gynecologic surgeons' awareness of surgical ergonomics.

Methods: Outcome measures were used to evaluate whether a presentation on ergonomics and correct posture in the operating room improved gynecologic surgeons' awareness and knowledge of good surgical ergonomics. The most common errors in posture were identified by analyzing 83 videos of gynecological cases which included laparoscopic, open and vaginal surgery. One study showed that an ergonomics curriculum resulted in a change in practice habits as well as significant reduction in pain/discomfort amongst surgeons therefore an educational presentation was expected to improve awareness of ergonomics among gynecologic surgeons. A presentation which outlined the most common mistakes in posture as well as ergonomic recommendations in the operating room to avoid musculoskeletal pain was given to gynecologic surgeons. The same five question survey was administered both before and after the ergonomics presentation to measure whether ergonomics awareness had improved.

Results: 19 OB/Gyn resident and attending physicians were surveyed. 79% of respondents endorsed experiencing surgery-related musculoskeletal pain. Prior to presentation on surgical ergonomics, 79% of respondents felt that surgical instrumentation inhibited good surgical ergonomic technique. This increased to 84% following discussion. Knowledge of the most common errors in ergonomic techniques made by gynecologists improved from 16% pre-presentation to 100% post-presentation. 46% of respondents initially felt they could identify good surgical ergonomics which improved to 100% following the presentation. 100% of respondents reported familiarity with ways to improve ergonomics in the OR following presentation compared with 16% prior.

Conclusion: Education on proper surgical ergonomics can improve gynecologic surgeons' awareness of both the importance of ergonomics to prevent musculoskeletal pain and injuries as well as ways to identify and improve ergonomics in the operating room. This has implications for the need for a continued ergonomic education aimed at OB/Gyn physicians in order to promote continued awareness of posture and proper surgical ergonomics.