Evaluation of Strabismus Surgery in University of Colorado Ophthalmology Residents

Abstract

Purpose: To evaluate proficiency in strabismus surgery among University of Colorado ophthalmology residents using a modified strabismus surgery evaluation rubric.

Methods: The Modified Strabismus Surgery Evaluation Rubric was created to augment the validated ICO-OSCAR: strabismus tool. The modified rubric assessed residents in 21 pre-op, surgical, and post-op steps based on a Likert scale of 1 (novice) to 5 (expert). Rubrics were compiled and analyzed in Matlab and Excel to investigate overall proficiency and proficiency in each of the individual components. Proficiency was defined as scoring a 4 on the Likert scale for at least 2 consecutive cases. Evaluations were completed by 5 University of Colorado faculty attending physicians for ophthalmology residents during their pediatrics rotation at the Children's Hospital of Colorado. The 109 rubrics used in the analysis were completed by attending physicians for 9 total residents.

Results: On average, residents were proficient in all components of the rubric by the end of 18 cases and proficient in the surgical steps by the end of 20 cases. Strongest skills included discharge paperwork and consent (8 and 9 cases until proficient, respectively) while the weakest skill was hooking the rectus muscle (23 cases until proficient).

*Conclusion*s: Compiled data from the Colorado strabismus surgery rubric identified areas of strengths and weaknesses within the University of Colorado ophthalmology residents. While more data is needed, these initial results can be used to improve resident training at a program level.