

Navigating with an OASIS in mind: an audit of Obstetric Anal Sphincter Injuries in a major metropolitan hospital

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Introduction

Obstetric Anal Sphincter Injuries (OASIS) have a significant impact on a woman's quality of life, leading to complications including perineal pain, voiding difficulties, and anal incontinence. Currently, OASIS affects 6,500 Australian women each year, with a rising incidence Australia-wide¹ and the rest of the developed world². Our department noted a rise in the number of OASIS in January 2019. This study aimed to identify risk factors for OASIS in our local population and analyse risk factors contributing to an increasing OASIS rate.

Methods

Data were obtained in a retrospective, consecutive manner. Patient cohorts were split between vaginal delivery in January 2018 (n=226) compared to January 2019 (n=266). Univariate and Multivariate analyses were undertaken to assess the risk factors for OASIS between cohorts. Statistical comparisons were made using GraphPad Prism 8.1.0 (Mac) software.

Results

Part I: Local OASIS Risk Factors

Risk factors for OASIS included nulliparity [p<0.01, Chi-square], assisted delivery [p<0.05, Chi-square], prolonged second stage [p<0.001, Chi-square], birthweight >4kg [p<0.01, Chi-square] and increased head circumference [p<0.05, Student's t-test].

Part II: Changes in Practices between 2019 and 2018

Increase in OASIS in January 2019 was associated with higher birthweight (p<0.05, Student's t-test) as well as an increase in the proportion of deliveries conducted by less experienced accoucheurs [p<0.05, Chi-square] when compared with January 2018.

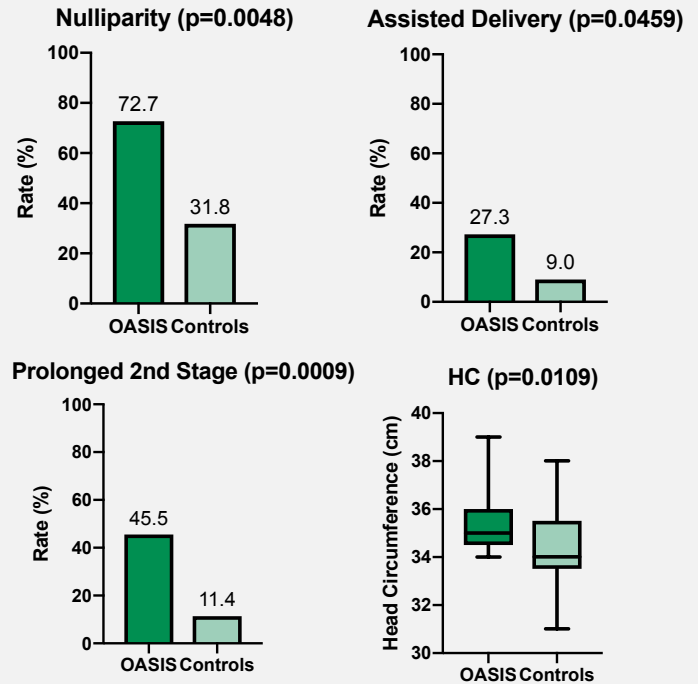
Conclusion

Data from our unit are consistent with the literature for known risk factors for OASIS. Nulliparity, assisted delivery, prolonged second stage, birthweight >4kg and increasing head circumference were corroborated as statistically significant risk factors for OASIS. There were no patient demographic factors nor any changes in birthing practices that contributed to the rise in OASIS. Our study identified delivery by less experienced accoucheurs and overall heavier babies as significant associations for increased OASIS rates. Paradoxically, fewer forceps deliveries and a reduction in the proportion of women with a prolonged second stage were also noted.

References

1. Australian Institute of Health and Welfare. National core maternity indicators – stage 3 and 4: results from 2010–2013. Canberra: AIHW; 2016. AIHW Cat. no. PER 84.
2. Guroi-Urganci I, Cromwell DA, Edozien LC, Mahmood TA, Adams EJ, Richmond DH, et al. Third- and fourth-degree perineal tears among primiparous women in England between 2000 and 2012: time trends and risk factors. BJOG 2013;120:1516–25.

Part I: Local OASIS Risk Factors



Part II: Changes in Practice between 2019 and 2018

