

## Abstract

### **Improving detection rate of Occult OASIS using angle of episiotomy: Malaysian experience**

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**Objective:** The incidence of obstetrics anal sphincter injuries (OASIS) is quoted at 1-2%. The incidence of OASIS is 0.14-0.2 % in a busy tertiary centre in Kuala Lumpur Hospital. This is lower compared to most centres in the world. Possible explanation could be due to unrecognised OASIS. The incidence of occult OASIS in nine prospective studies were between 20-41%. The prevalence increased significantly from 11 to 24.5% when re-examined with ultrasound. We undertook this study to elicit the incidence of occult OASIS using a transperineal ultrasound and its association with angle of episiotomy performed.

**Methodology:** This prospective trial was conducted from February 2017 until July 2017 in Kuala Lumpur Hospital. All primigravida delivered during the period of study who had episiotomy were recruited. A postpartum clinical examination including angle of episiotomy performed and a transperineal ultrasound done within 6 months following delivery.

**Results** A total of 216 patients enrolled in the study. There were 38 (17.6%) patients who had ultrasound diagnosis of anal sphincter injury. Of these, the incidence of occult OASIS increased as the angle of episiotomy decreased. One hundred and seventy-four women (80.5%) had episiotomy angle less than 45 degrees and the incidence of occult OASIS among them was 21.1%.

**Conclusion:** The incidence of occult OASIS is diagnosed with a transperineal ultrasound. The episiotomy angle can be used to predict the risks of occult OASIS in centre where transperineal ultrasound is not available. Measuring the angle of episiotomy should be routinely done in order to increase the detection of occult OASIS and minimise the risk of future anal incontinence.