

OBSTETRIC ANAL SPHINCTER INJURY AND
RISK FACTORS- A RECENT REVIEW

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- Declaration of interest- None

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Background

- Obstetric anal sphincter injury (OASI) is a complication of vaginal delivery which can have serious impact on a patient's QoL.
- Increase in rates of OASI was noted and this study was aimed to assess the risk factors for our population.
- A secondary aim was also to examine the relationship between episiotomy and OASI.

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Methodology

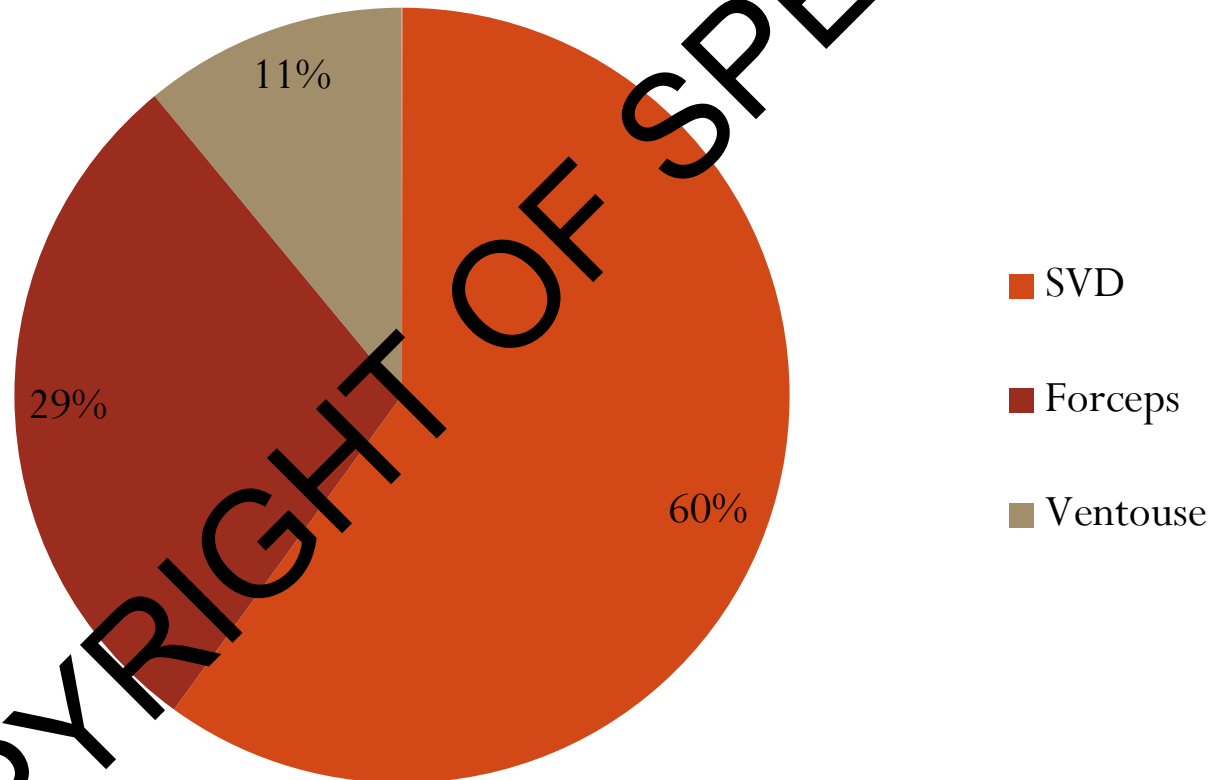
- This is a retrospective study. Data on all pregnancies between January and December 2012, (excluding caesarean sections and non-vertex presentations) were reviewed (n=6582).
- OASI was defined as a third or fourth degree tears to the anal sphincter muscles.
- Various factors were compared between those that sustained an OASI and those with intact perineum (including 1st and 2nd degree tears)
- Both univariate analysis and multivariate logistic regression were used in the analysis

Results

- The incidence of OASI was 2.17% (n=143).
- Of those with OASI, 62% were nullips
- 40% had an instrumental delivery
- 47% had a mediolateral episiotomy

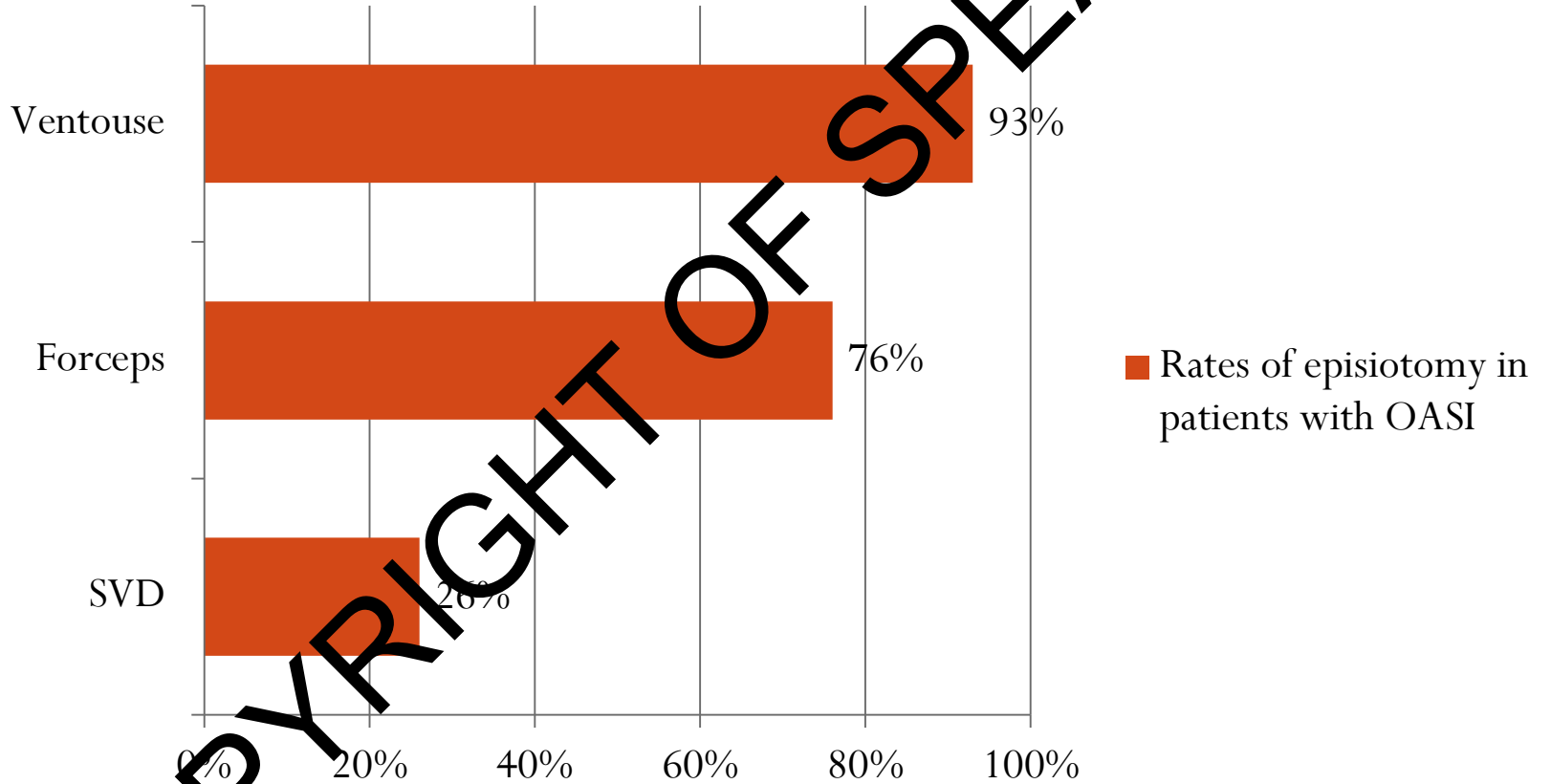
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Mode of delivery in patient's with OASI



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Rates of episiotomy in patients with OASI



Increased risk of OASI

- Forceps OR 7.9 (95% CI 5.4-11.8),
- Ventouse OR 1.7 (95% CI 0.9-2.8),
- Nulliparity OR 2.3 (95% CI 1.6-3.2).
- Episiotomy OR 2.27 (95% CI 1.6-3.2).

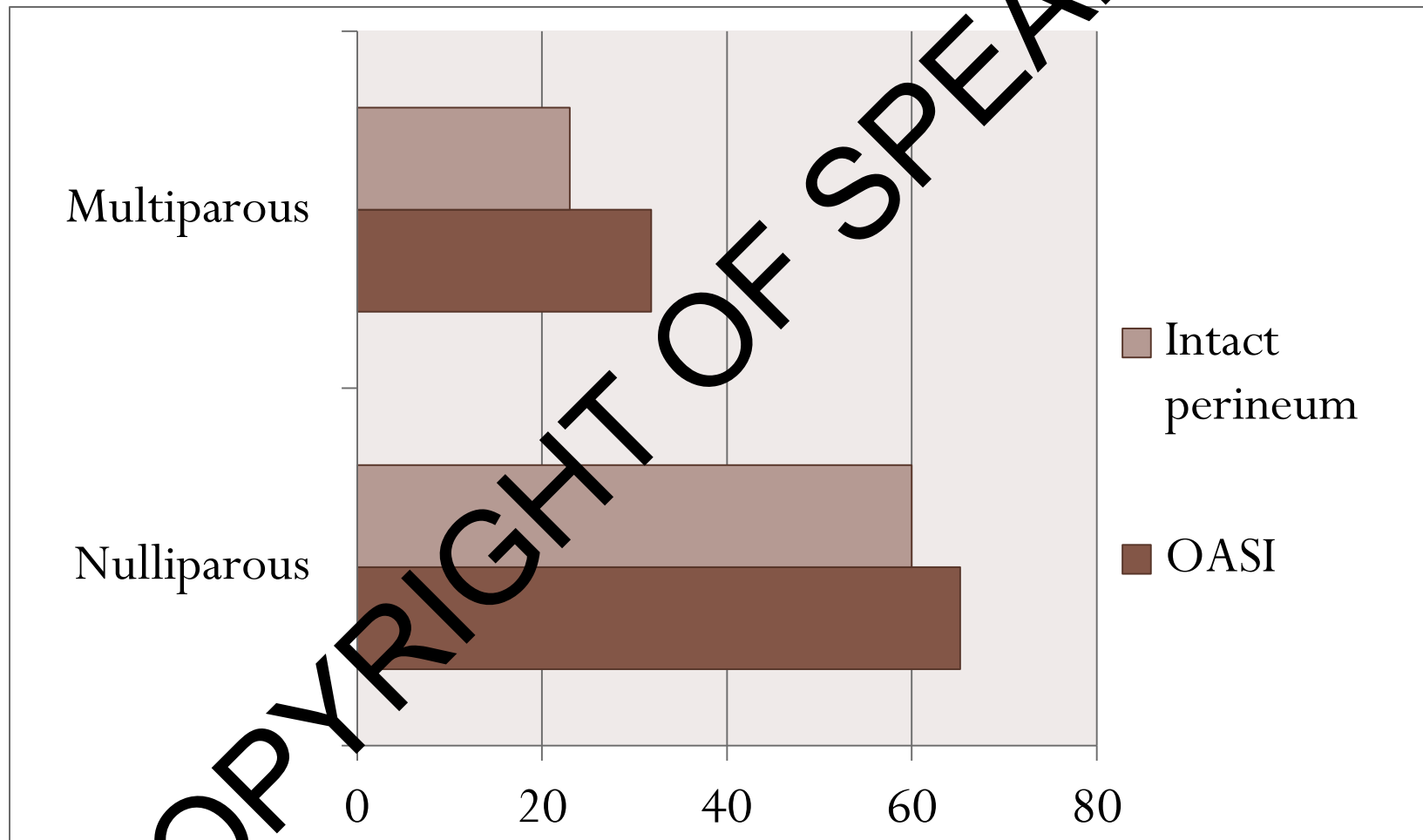
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Other risk factors

- Higher birth weight (3,749g versus 3,567g; $p < 0.01$)
- Higher gestational age (40 vs 39.5weeks, $p < 0.01$).
- Increase in the length of the second stage of labour (52minutes versus 38minutes; $p < 0.01$);

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Second stage of labour in minutes

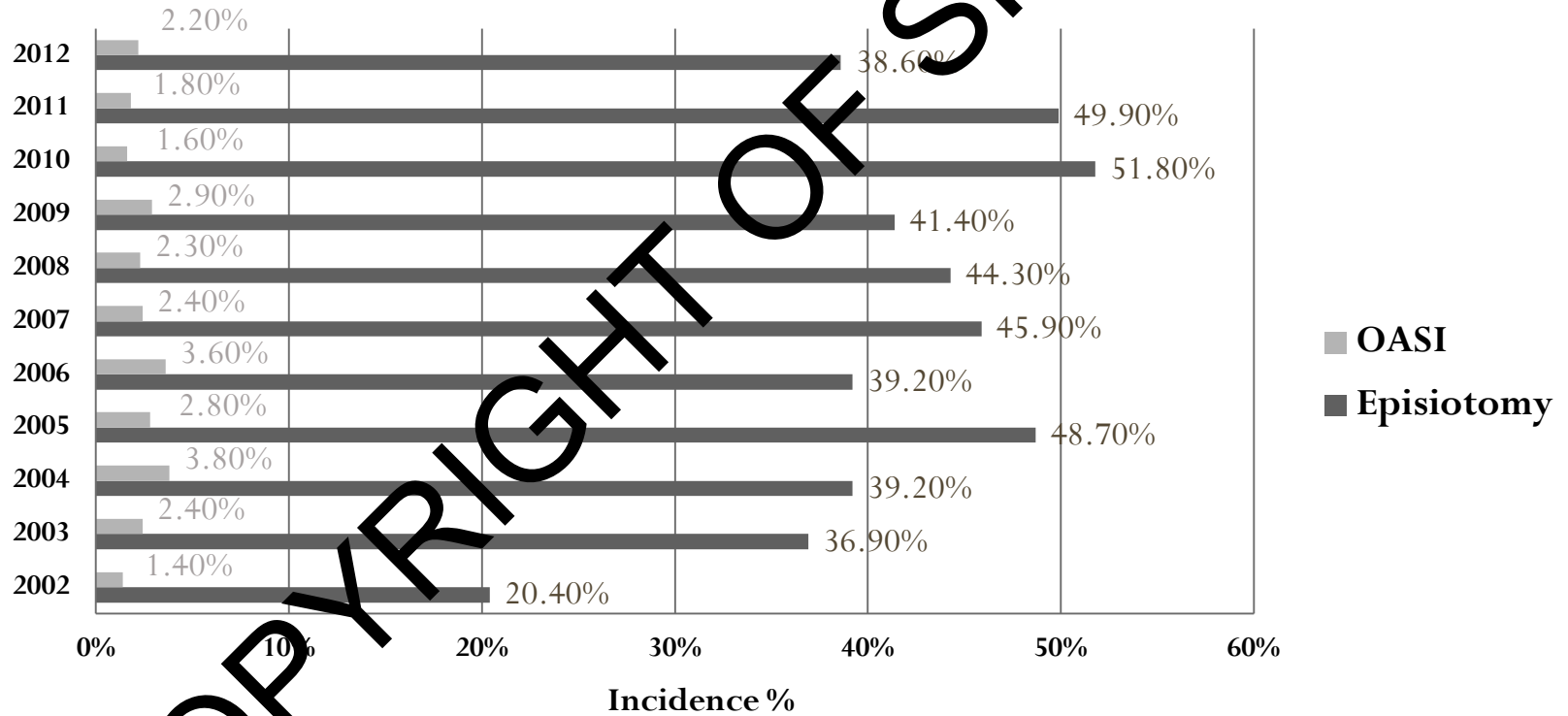


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Further insight into our Episiotomies

- Retrospective review of the trend of variation in rates of episiotomy and OASI in our primigravida population with SVD over the last 10 years.
- The average rate of episiotomies over the past 10 years in primigravida with SVD was 37%, with a 2% rate of OASI.
- The rate of episiotomy relatively increased in the past few years, however, no reduction in OASI was seen.

**Incidence of episiotomy & OASI
In
Primigravida having SVD**



Conclusion

- Although our rates of OASI are within normal
- The result of this study reinforces some of the known risk factors associated with OASI including instrumental delivery, nulliparity, increased birth weight and prolonged second stage of labour.
- It also highlights the significant increase in risk associated with forceps delivery (OR 7.9).
- We also found that episiotomy may itself be a significant risk factor for OASI

Conclusion continued

- Further training with instrumental deliveries and perineum guarding
- The importance of selective use of episiotomy
- Continual education regarding appropriate episiotomy technique.

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