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Introduction

- The incidence of obstetric anal sphincter injury has increased in the past two decades despite improved awareness of the risk factors.
- It is known to be higher at the time of a first vaginal delivery.
- This study aimed to define the specific risk factors in primipara.

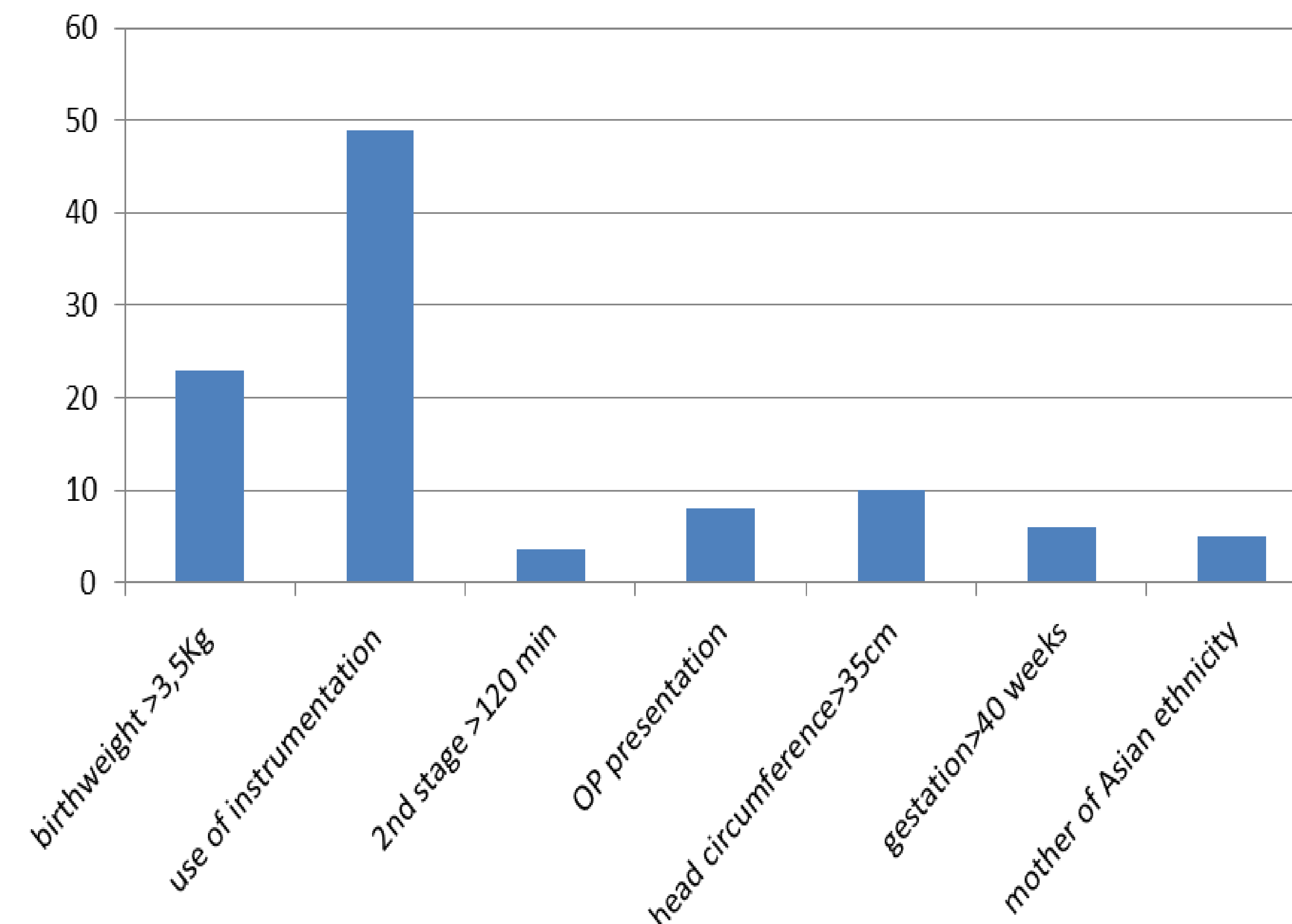
Methods

A systematic review was run on articles about incidence of OASIS in primipara and risk factors for OASIS. Databases used for the research were Medline, Embase, CINAHL and “Maternity and infant care” databases.

Results

- 4907 articles published between 1971 and February 2021 were found. After removal of duplicates 2580 were screened for title and abstract.

- 588 full texts studies selected and assessed for eligibility: 300 studies included. The median incidence of OASIS in primipara has been reported: 7.51%. Primiparity resulted one of the main risk factors for OASIS in 79 articles out of 220 selected for risk factors for OASIS.
- Within the 73 articles that have a specific group of primipara as participants these were the main risk factors for OASIS (see figure) :



birthweight of the child >3,5Kg; instrumental assisted vaginal delivery (vacuum or forceps or sequential use of instrumentation), longer 2nd stage of labour (>120 minutes); occipito posterior (OP) presentation of the fetus head, head circumference of the fetus >35 cm; longer gestational age (>40 weeks); Asian ethnicity of the mother. The main protective factors for OASIS : use of mediolateral episiotomy during both vacuum and forceps deliveries; regular strenuous exercise ; hands on the infant head.

Conclusion

Primiparity is one of the main risk factors for OASIS and cannot be avoided while some of the risk factors (use of instrumentation) could be potentially modified or avoided to reduce the incidence of OASIS.