

# Correlation of preoperative and intraoperative assessment of pelvic organ prolapse by pelvic organ prolapse quantification system : a cross sectional study

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## Abstract

**Objective-** To correlate the assessment of pelvic organ prolapse between POP-Q score measured preoperatively with Valsalva manoeuvre and intraoperatively with mechanical traction. **Design –** Cross sectional **Setting –** Midnapore Medical College ,Midnapore , West Bengal , India **Sample -** Women attending gynaecology out patient department ( OPD) with symptomatic pelvic organ prolapse and planned for vaginal operative treatment between March 2019 to February 2020. **Methods -** Preoperative examination was done in OPD by POP-Q system with Valsalva manoeuvre and final examination was done under spinal anesthesia with mechanical traction. The correlation was done between pre and intraoperative measurements. **Results:** All intraoperative POP-Q measurements showed significant higher descent as compared with preoperative measurements (mean difference Aa 0.72cm, Ba 1.08cm, C 1.66cm, Ap 0.26cm,Bp 1.6cm, D 1.6cm, Gh 0.6cm,) except for Pb and Tvl. . Among all nine measurements the greatest difference between preoperative and intraoperative were observed for point C, D and Bp. **Conclusion:**Preoperative POP-Q score significantly differed when assessed intraoperatively under spinal anesthesia with traction. Patient should be informed that the surgical plan might change depending on the intraoperative findings. Our study is an alert for both surgeon and patient.

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## Running Title - Preoperative and intraoperative assessment of POP

## Abstract

**Objective-** To correlate the assessment of pelvic organ prolapse between POP-Q score measured preoperatively with Valsalva manoeuvre and intraoperatively with mechanical traction.

Design – Cross sectional

Setting – Midnapore Medical College ,Midnapore , West Bengal , India

Sample - Women attending gynaecology out patient department ( OPD) with symptomatic pelvic organ prolapse and planned for vaginal operative treatment between March 2019 to February 2020.

Methods - Preoperative examination was done in OPD by POP-Q system with Valsalva manoeuvre and final examination was done under spinal anesthesia with mechanical traction. The correlation was done between pre and intraoperative measurements.

**Results:** All intraoperative POP-Q measurements showed significant higher descent as

compared with preoperative measurements (mean difference Aa 0.72cm, Ba 1.08cm, C

1.66cm, Ap 0.26cm,Bp 1.6cm, D 1.6cm, Gh 0.6cm,) except for Pb and Tvl. . Among all nine measurements the greatest difference between preoperative and intraoperative were observed for point C, D and Bp.

**Conclusion:** Preoperative POP-Q score significantly differed when assessed intraoperatively under spinal anesthesia with traction. Patient should beinformed that the surgical plan might change depending on the intraoperative findings.Our study is an alert for both surgeon and patient.

Tweetable Abstract - Preoperative POP-Q score significantly differs when assessed intraoperatively under spinal anesthesia with traction in women wuth advanced POP.

**Compliance with ethical standard** –All procedures performed in this study involving human participants were in accordance with the ethical standards of our institutionand with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. The study was approved by Institutional Ethics Committee of Midnapore Medical College( letter number -MMC/ IEC-2019/193) and **informed consent** was obtained before enrolment.

**Conflict of interests-** There was nothing to disclose regarding financial, personal, political, intellectual or religious interests. There is no conflict of interests.

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**Author contribution** –

Dr Snehamay Chaudhuri - conception and design, analysis and interpretation of data, drafting the article , revising it critically for important intellectual content & final approval of the version to be published. Dr Vaitheeswari J - conception and design, collection of data, analysis and interpretation of data, drafting the article , revising it critically for important intellectual content & final approval of the version to be published.

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**Figure 1- Flowchart depicting study subjects flow**

