Hypothesis / aims of study
The aim of this study is to determine risk factors for pelvic organ prolapse in premenopausal women.

Study design, materials and methods
A retrospective case control study was performed, identifying 157 women who underwent vaginal hysterectomy for genital prolapse from 1995-2004. Patients were classified into two groups: cases were premenopausal women compared to postmenopausal women as our control group. Data collected in both groups included: age, parity, mode of delivery, birthweight, smoking, chronic constipation, the presence of first degree family history of prolapse and coexistent medical conditions. Fischer exact test was used to compare risk factors between cases and controls.

Results
Data were available on 140 patients. During the study period, there were 41 premenopausal women and 99 postmenopausal women who had vaginal hysterectomy for pelvic organ prolapse. In premenopausal versus postmenopausal groups, respectively, the outcomes were: mean age 43.8 vs 62.8 years, parity of 2.4 vs 2.8, vaginal delivery 92% vs 97%, forceps delivery 40% vs 19% (p<0.05), newborn size >4kg 57% vs 49%, smoking 19.5% vs 13%, chronic constipation 19.5% vs 25%, presence of family history of prolapse 2% vs 2%. Medical conditions included low back pain 53.6% vs 48%, diabetes 9.7% vs 11% and hernia 9.7% vs 10%.

Interpretation of results
Fischer exact test showed that forceps delivery is a significant risk factor (p<0.05). Other variables were not statistically significant.

Concluding message
In our study, we have shown that forceps delivery is a risk factor for the development of pelvic organ prolapse in premenopausal women. Knowledge of the risk factors may help clinicians in counselling women in ways to prevent pelvic organ prolapse at such an early age. Prospective studies, and basic science research is required to determine other factors leading to pelvic organ prolapse in young women.

Specify source of funding or grant
NONE

Is this a clinical trial?
No

What were the subjects in the study?
NONE