## Joint hypermobility, obstetrical outcomes, and pelvic floor disorders

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SUMMARY: "Hypermobile" joints are more flexible than typical joints. A syndrome known as "benign joint hypermobility syndrome" describes a condition in which the person has several hypermobile joints (e.g., the ability to bend the thumbs backwards toward the wrists, etc.). Benign joint hypermobility syndrome can be measured with a series of maneuvers to assess the flexibility of the thumb, elbow, knee and other joints. In MOAD, joint hyperflexibility was measured among the first women who joined the study.

Our primary objective was to investigate the association between joint hypermobility syndrome and obstetrical outcomes. We hypothesized that women with joint hypermobility would have easier deliveries. For example, we speculated that they would be less likely to require operative delivery (forceps or vacuum to help pull the baby out at the time of vaginal birth). We also thought that they would get through the last part of labor more quickly and that they would be less likely to need a cesarean delivery during the last part of labor.

For this part of our research, we included information related to 587 MOAD members who participated in the joint mobility measurements and who experienced labor at least once. Details about their childbirth histories were obtained from review of hospital records. We compared obstetrical outcomes between women with and without joint hypermobility.

Hypermobility was diagnosed in 46 of 587 women (7.8%). Women with hypermobility were less likely to need a cesarean after complete labor (e.g., after dilation of the cervix to 10cm). They were also less likely to have an operative vaginal delivery (forceps or vacuum birth). Women with hypermobility were also less likely to have a severe tear at the time of vaginal delivery (specifically, an anal sphincter laceration).

This research suggests that joint hypermobility syndrome may facilitate an easier vaginal birth.

In a separate analysis, we investigated whether women with hypermobile joints are more likely to have "pelvic floor disorders" (such as vaginal prolapse). There was no association noted between hypermobility and pelvic floor disorders.

This research appeared in the International Urogynecology Journal. You can read the full text here:

http://www.hopkinsmedicine.org/johns hopkins bayview/ docs/medical services/obstetrics g ynecology/research/MOAD/JointFlexibility\_FullText.pdf