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## **One size does not fit all: diagnosis and treatment of pelvic floor trauma following spontaneous vaginal delivery- a tailored approach**

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The miracle of childbirth is often clouded by the adverse effects on the soft tissue of the pelvic floor induced by passage of the fetus through the birth canal, which can ultimately have a significant impact on the quality of life of women. The aim of this presentation is provide an illustration of the origins and consequences of maternal pelvic floor trauma on the structure and function of the urogenital system and to present a complex realistic approach to surgical management of pelvic floor defects. An MRI derived 3-D model of the female pelvis with high-resolution images demonstrating key anatomical structures as are visualized during surgery will be utilized. The etiology of pelvic floor trauma during childbirth will be discussed and the biophysical principles underlying the mechanical strain and load on the soft tissues with passage of the fetal head during vaginal delivery will be addressed. The operative method will be illustrated through a series of photo slides detailing intraoperative technique, identification and utilization of native tissue structures (fascia), suture placement and material as well as a general appreciation for the interconnectedness (tissue mapping) of the pelvic floor muscles, fascia, and paravaginal tissues in the anatomical restoration of the vaginal axis, length, and overall physiological function. Lastly, the important role of postoperative physiotherapy and education of women in regaining pelvic floor function should not be underestimated and used concurrently with surgery to insure successful patient outcomes.