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**Title:** THREE-DIMENSIONAL DISSECTION OF THE FEMALE PELVIS INCLUDING NAVIGATION TO SACRAL NERVE ROOTS.

**Aims Of Study:**

The increasing number of female pelvic procedures done by urologists, including the placement of sacral nerve root stimulators, demands a better understanding of the details of anatomic correlations between interpelvic and extrapelvic structures. With the "Visible Human Project" database, we have reconstructed the details of Female Pelvic Organs including the Sacral Nerve Roots. These 3D models allow the illustration of needle approaches (both correct and incorrect) to those roots using the paths of least complication from intervening neurovascular structures.

**Methods:**

The Visible Human Project presents the most detailed photographic computerized volume anatomy available. This public domain resource was created for the National Library of Medicine by the University of Colorado Center for Human Simulation. The male specimen whole body and the female pelvic organs have been segmented, classified and modeled. These models are rendered as 3D objects and presented to highlight their geometric relationships. The intervention of a nerve stimulator can then be added to the rendering in a manner that best illustrates the anatomy in the path of the needle. The results can be displayed in 3D or on conventional displays in 2D but with rotation of the pelvis through small angles to emphasize the relationships of the anatomic structures.

**Results:**

The presentation of the anterior and posterior sacral neuromuscular anatomy and its relationship to the intervening tissues during a percutaneous procedure is greatly enhanced by stereo 3D imagery. The Visible Human contains all the relevant anatomy for such procedures. The assembly, multiple-dissection and variable transparency available in cyberspace, and unavailable in the real world, make this form of educational presentation a necessary adjunct for the efficiency required in medical and CME education.

**Conclusions:**

Using the human-based "Visible Human Project" data base, three dimensional images of the female pelvic organs and sacral roots can be used for research, and educational purposes in the field of "Female Pelvic Medicine & Reconstructive Surgery". The interactive three-dimensional images will be demonstrated at the time of the presentation.