

The following is a summary of Dr. Helen O'Connell's presentation given at the 2003 *International Society for the Study of Women's Sexual Health* Conference in Amsterdam.

Female Sexual Anatomy: Discovery and Re-Discovery
Helen O'Connell, M.D.

Dr. Helen O'Connell is the Chief of NeuroUrology and Continence at the Royal Melbourne Hospital. Her research has examined the structure of the clitoris through the use of dissection, histology (which is the microscopic study of the form and structure of various tissues), and magnetic resonance imaging (MRI).

Although over the centuries anatomical authorities have attempted to describe the anatomy of the clitoris, present day anatomical textbooks still fall short in their descriptions. Dr. O'Connell's research has focused on the structure of the clitoris, encompassing such issues as whether or not the bulbs of the vestibule should be included in clitoral anatomy; the vascular and neural inputs along the autonomic pathways; the relationship of the clitoris to other structures such as the urethra and vagina; the histology (define this again) of the clitoris; the connective tissues that support it; the use of objective media to study clitoral anatomy, such as MRI and serial photography of dissections, and reviewing historical and modern texts to determine a more precise and accurate description.

The clitoris is much larger than originally thought, up to 9 cm. in length and 6 cm. in width in younger women. Multi-dimensional views of the clitoris are not possible in textbooks, where images are rendered in one plane or as a flat structure. With the use of MRI, the multi-planar view of clitoral anatomy can be seen within the body of a living woman. This MRI view is a very different representation of clitoral anatomy than the traditional source of medical dissection with donor tissue from elderly women which may have atrophied.

Dr. O'Connell has also helped to distinguish the relationship between the urethra, distal vaginal wall and the clitoris, and the autonomic nerves in her research.

The lay public as well as the healthcare community may be most surprised to know that through Dr. O'Connell's research, it is now believed that the current anatomical textbooks, including Gray's Anatomy, is very deficient in representing the true anatomical structure of the clitoris; this includes textbooks used to teach medical students.

Through Dr. O'Connell's work, science is gaining a new perspective and more accurate understanding of the anatomy of the clitoris.

Lisa Martinez

For more information on Dr. O'Connell's work, see the following sources:

[O'Connell HE, Hutson JM, Anderson CR, Plenter RJ.](#)

Anatomical relationship between urethra and clitoris.

J Urol. 1998 Jun;159(6):1892-7.

PMID: 9598482 [PubMed - indexed for MEDLINE]

[Rees MA, O'Connell HE, Plenter RJ, Hutson JM.](#)

The suspensory ligament of the clitoris: connective tissue supports of the erectile tissues of the female urogenital region.

Clin Anat. 2000;13(6):397-403.

PMID: 11111889