Automatic segmentation and 3D visualization of MR images of pelvic floor *(Poster Session)*

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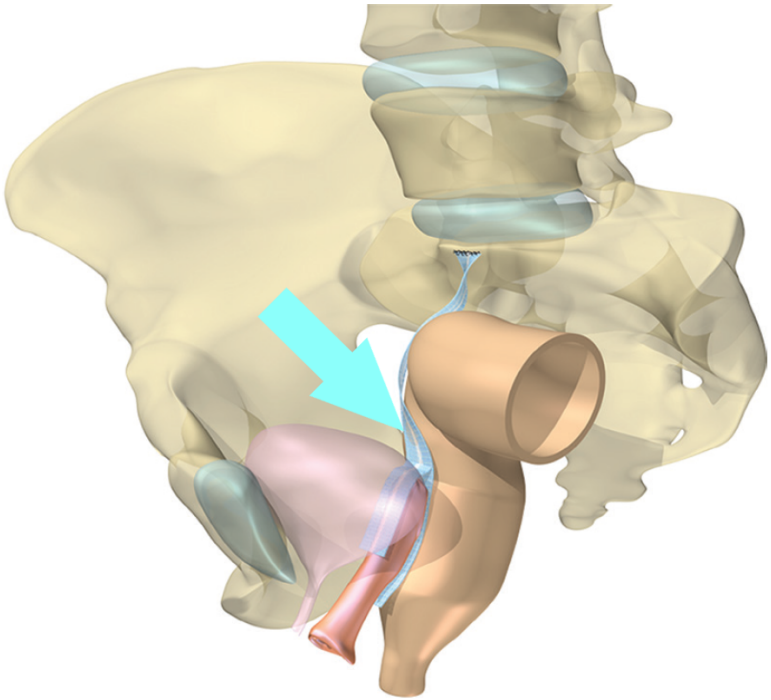


Figure: A sketch of a synthetic implant shown relative to organs of pelvic floor.

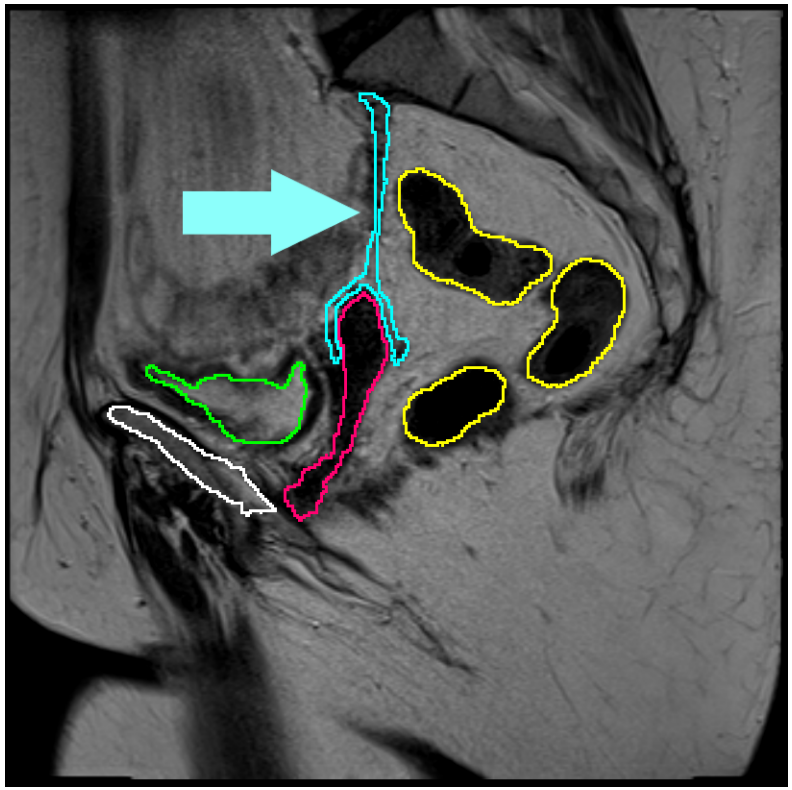
(from "Postoperative Imaging after Surgical Repair for Pelvic Floor Dysfunction" by G. Khatri et. al., *Radiographics* 36.4 (2016), pp. 1233-1256)

Background:

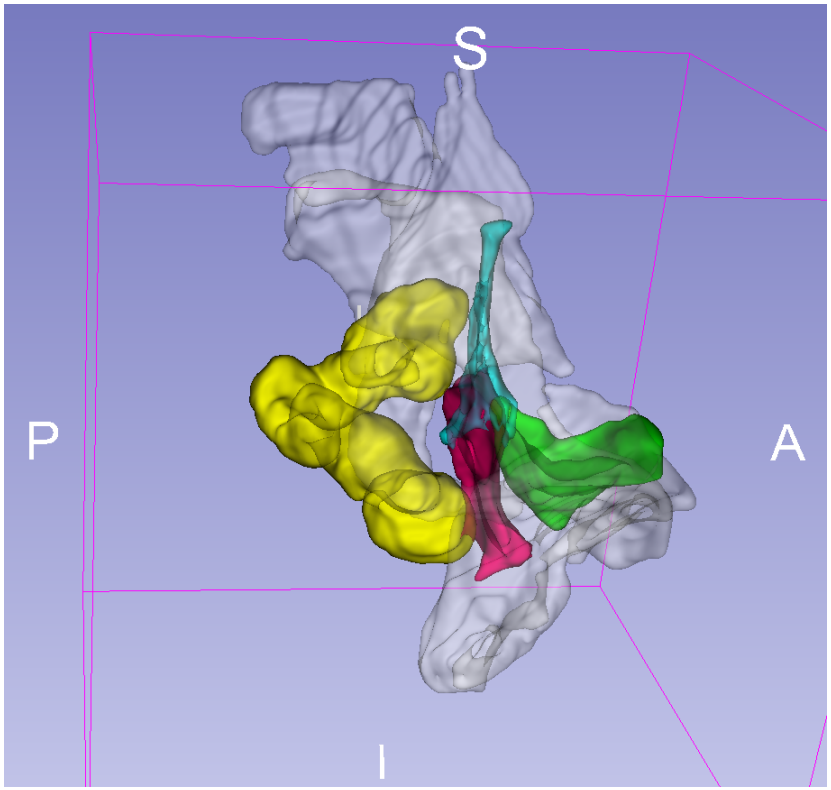
- Pelvic floor disorders affect nearly 1 in 4 women in the US. Most common surgical repair procedures of pelvic floor include placement of synthetic implants.
- Due to surgical complications, these implants may have to be removed at a later time. However, these implants have poor visibility in MRI and US.

Goals:

- Automatically segment MR images of important pelvic organs and implants.
- Develop a 3D visualization pipeline to assist radiologists and surgeons during surgical planning.



(a) Sagittal MRI slice with SC mesh shown near cyan arrow.



(b) 3D visualization of pelvic floor structure created from labeled data.