# 2016 Scientific Research Project – 1<sup>st</sup> Prize Winner

#### SE007

## COMPARATIVE EVALUTION OF DEFECOGRAPHY PHASE TO NON-DEFECOGRAPHY VALSALVA MANEUVER IN DYNAMIC PELVIC FLOOR MRI

# Authors: <u>Hina Arif</u>, James Costello, Joel Funk, Bobby Kalb, Diego Martin, Arash Meshksar, Iva Petkovska, Ferenc Pommersheim, Christian Twiss

**OBJECTIVE:** To evaluate the utility of Defecography phase (DP) in dynamic pelvic floor MRI, in comparison to non-defecography Valsalva maneuvers (VM).

**METHODS:** Study IRB-approved, HIPPA compliant. Inclusion criteria selected total of 237 female patients with chief complaint of urinary or fecal incontinence and physical exam findings of pelvic floor prolapse. All MR exams were obtained following insertion of ultrasound gel into the rectum and vagina. Steady state free precession sequences in sagittal plane were acquired in the rest state, followed by dynamic cine acquisitions during VM and DP. All images were reviewed in blinded fashion by two radiologists. The HMO system was employed for quantification of pelvic floor descent, and measured in all three phases. In addition, the presence of a rectocele, enterocele and inferior descent of the ano-rectal junction, bladder base and vaginal vault was recorded in all patients, utilizing the pubococcygeal line (PCL) as a fixed osseous landmark.

**RESULTS:** Ano-rectal descent, cystocele and vaginal vault descent was seen in 216 (91%) 177 (74%) and 172 (72%) in DF, compared to 74%, 40% and 27% on VM. Average bladder base and vaginal decent was 3.0 cm and 3.05 cm with DF, compared to 1.58 cm and 1.57 cm with VM.

**CONCLUSION:** Addition of defecography phase to dynamic pelvic floor MR unmasks a greater degree of instability involving the pelvic floor, as compared to imaging during VM alone. Pelvic floor structures may show mild instability or even appear normal on the straining phase, with marked prolapse subsequently revealed on DP images.

### SE003

# PUBLICATION RATES OF ABSTRACTS PRESENTED AT MAJOR INTERVENTIONAL RADIOLOGY CONFERENCES

### Authors: Ravi T. Shergill, Mark O. Baerlocher, Hussam Kaka, Sean A. Kennedy

**OBJECTIVE:** To determine the publication rate and factors predictive of publication of oral presentations at the two largest interventional radiology conferences; the Society of Interventional Radiology (SIR) and the Cardiovascular and Interventional Radiology Society of Europe (CIRSE).

**METHODS:** Keywords and authors from oral presentation abstracts at the 2012 SIR and CIRSE annual meetings were searched to identify subsequent publication using PubMed and Google Scholar.

Logistic regression was performed to identify if the following characteristics were predictors of publication: number of abstract authors, first author's country of origin, subject category, methodology, study type(retrospective/prospective), study results(positive/negative).

**RESULTS:** 421 abstracts (SIR-295,CIRSE-126) met the inclusion criteria. The overall publication rate across both conferences was 44.9%. The overall time to publication was 15.93±8.84 (SD) months, with 16.33±8.82 for SIR and 15.03±8.88 for CIRSE. The overall impact factor of published abstracts was 2.95±2.85, with 2.99±3.01 for SIR and 2.89±2.29 for CIRSE. Differences in time to publication and impact factor were not statistically significant (p=0.31 and p=0.36, respectively).

The most common country of origin for published abstracts was the United States(69.0%) at SIR and Germany(27.1%) at CIRSE.

Logistic regression did not identify factors that were predictive of future publication.

The top three topics of both submitted and published abstracts across both conferences were oncology, arterial vascular, and venous vascular.

**CONCLUSION:** Publication rates are similar across SIR and CIRSE. Factors such as country of origin, topic of study and study results are not predictive of future publication. Authors should not be discouraged from submitting their work to journals based on these factors.