**Abstract No. 98**

**Relationships between conflicts of interest and publication type: the importance of managing bias in interventional radiology research**

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**Purpose:** To characterize the relationships between disclosed conflicts of interest (COIs) and publication type in the *Journal of Vascular and Interventional Radiology (JVIR)* to identify opportunities to support the integrity of interventional radiology (IR) research.

**Materials and Methods:** All *JVIR* publications in 2019 were cataloged based on publication category, official *JVIR* publication type, device focus, COI disclosure, and whether or not they were a part of CME and Society of Interventional Radiology (SIR) annual meetings. Publication categories included Primary Research, Systematic Review, and Other. Primary Research included the publication types Clinical Study, Laboratory Investigation, and Research in Translation; Systematic Review included Evidence-Based Review, Review Article, and Standards of Practice; Other included the remainder (e.g., Letter to the Editor or Commentary). Prevalence of COIs and device focus was characterized and compared within the various publication cohorts using Fisher’s exact tests with statistical significance defined as \(P \leq .05\).

**Results:** A total of 397 *JVIR* publications, 114 with COIs (29%) and 68 with device focus (17%), were evaluated. Prevalence of COIs was significantly lower in Other compared to Systematic Review (25% vs 50%, \(P = .04\)), but not between Systematic Review and Primary Research (\(P = .16\)) or between Other and Primary Research (\(P = .21\)). Prevalence of device focus did not vary significantly among Primary Research, Systematic Review, and Other (\(\chi^2\)-test \(P = .20\)). COIs were more prevalent in device-focused papers (54% vs 23%, \(P < .0001\)), and this trend continued in Primary Research (61% vs 23%, \(P < .0001\)), Clinical Study (55% vs 23%, \(P = .001\)), Laboratory Investigation (78% vs 23%, \(P = .03\)), Letter to the Editor (45% vs 16%, \(P = .01\)), and publications presented at SIR annual meetings (100% vs 30%, \(P = .02\)). There was no significant relationship between COI and device focus among Systematic Review and publications that qualified for CME credit.

**Conclusions:** Disclosed COIs are prevalent in IR research. They are more common in device-focused publications, especially in Laboratory Investigations and those presented at SIR annual meetings. Because previous work has suggested that bias associated with COIs is often incompletely managed, it may be particularly important for IR to develop innovative means of managing COIs to ensure the integrity of research in the field.

**Abstract No. 99**

**Financial reimbursement in interventional radiology procedures: multicenter analysis within the Americas**

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**Purpose:** To compare financial reimbursement costs related to interventional radiology procedures (IRP) across USA, Canada (Ontario) and Brazil.

**Materials and Methods:** Medicare Billing (based on RVU and CPT codes) obtained from a single institution was considered as the primary database for US billing. USA Procedure Reimbursement Fees (PRF) included billings in NON FAC PAR, NON FAC NON PAR, NON FAC LC, FAC PAR, FAC NON PAR and FAC LC categories. However, NON FAC PAR fees were utilized as a US Standard baseline for comparison with Ontario and Brazil. Brazilian private PRF were obtained from a single institution. Canadian billings were obtained from a single institution in Ontario (OHIP Database). Equivalency factor for standardization of PRF included the pre-COVID cost of living adjusted income (using proportionate household disposable income as a basis) and pre-COVID foreign exchange rate for each country (February 2020), relative to USA. All currency values were presented in US dollar equivalent.

**Results:** 32 of 45 procedures met inclusion criteria with PRF present for each country. Procedures with fees not available in 1 or more countries were excluded. Brazil-USA: 19 (59%) procedures demonstrated an average of 66% lower fees in Brazil as compared to USA. Some of these procedures include varicocele embolization, portal vein embolization, uterine fibroid embolization, Gastrojejunostomy tube placement and IVC filter placement. Only 12 (37%) procedures demonstrated an average of 219% higher fees in Brazil as compared to USA. Canada-USA: 22 (69%) procedures were underpaid in Ontario (-95% to -19%). Some of these procedures include biliary stent insertion, CT-guided visceral biopsy, port insertion, cholecystostomy tube, carotid stenting, hepatic radiofrequency ablation, thoracoventer, mesenteric stenting and suprainguinal catheter insertion. 1 (3%) procedure was similar in PRF (variance within ±5%).

**Conclusions:** Variable PRF across nations has resulted in relatively low reimbursement fees in Brazil and Canada. Based on cost-of-living adjusted income and foreign exchange rate, a PRF reform is needed, in order to standardize IRP fees in Brazil, Canada and USA.

**Abstract No. 100**

**Analysis of findings on upper endoscopy versus patient outcomes in empiric embolization of the gastroduodenal artery for nonvariceal upper gastrointestinal bleeding related to duodenal ulcers**

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**Purpose:** Percutaneous transcatheter embolization is the preferred treatment for nonvariceal upper GI bleeding refractory to medical and endoscopic therapy. Several retrospective and studies have shown that empiric embolization of the gastroduodenal artery (GDA) is effective for duodenal ulcers if no source of bleeding is identified on angiography. We sought to evaluate patient and ulcer characteristics which may predict outcomes after empiric GDA embolization.

**Materials and Methods:** We retrospectively identified consecutive cases of empiric GDA embolization in the setting of nonvariceal upper GI bleeding related to duodenal ulcers from multiple hospitals in our health system in the past 5 years. 62 of these cases had electronic endoscopy reports. Patient characteristics and
Tibial-pedal artery access for uterine artery embolization
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Purpose: To demonstrate the rationale for and feasibility of tibial-pedal (TP) access as an alternative to trans-radial (TR) or trans-femoral (TF) access for uterine artery embolization (UAE).

Materials and Methods: 9 women ages 33-62 (mean 44) with a mean BMI of 32 (range 22.8-48.4) underwent UAE via TP access by a single operator in an academic center. 6 women had symptomatic fibroids, 2 women had hemorrhage from invasive uterine or cervical cancer, and 1 woman had post-partum hemorrhage from an arteriovenous malformation. Patencies of tibio-pedal arteries were documented pre-procedurally with palpation and/or ultrasound. With ultrasound guidance and micropuncture technique, a 5 French GlideSheath Slender (Terumo, USA) was placed and antispasmodic/anti-thrombotic medications were administered as previously reported for TR access. Hemostasis was achieved at 5 hours post procedure to 6 weeks in clinic via either manual palpation or ultrasound in 6/8 patients; 2 patients chose not to return to clinic during COVID-19 pandemic but were asymptomatic at phone follow-up; access arterial pulse could not be palpated in 2 asymptomatic patients at clinical follow-up (ultrasound was unavailable).

Conclusions: As previously described in the literature, clinical and demographic factors associated with primary hemostasis or coagulation were found to be statistically significant predictors of outcomes. Number of duodenal ulcers on endoscopy was also a statistically significant predictor of 30-day reintervention.