interventional radiology (IR) offers less risk, pain and recovery time. This translates into better care at lower cost when compared to traditional surgery. Medical care is evolving into a minimally invasive specialty which provides interventional radiologists the unique opportunity to take part in the rapidly growing cosmetic medicine marketplace. **Methods:** Comprehensive literature review was performed to identify the scope of IR within cosmetic medicine. Common cosmetic procedures performed by IR, techniques used and their effectiveness are investigated. **Results:** Varicose vein treatment, laser lipolysis and liposuction are frequently performed. Additional procedures such as botulinum toxin (Botox) injections, collagen fillers, arterio-venous malformation (AVM) sclerotherapy, laser skin resurfacing and hyperhidrosis treatment are also gaining popularity. Recent advances in endovenous techniques including endovenous laser therapy (EVLT), radiofrequency ablation and sclerotherapy have been revolutionary. EVLT has a 98% success rate and a long-term recurrence rate <7%, surpassing the results produced by traditional vein stripping. Laser lipolysis and liposuction are alternatives to invasive weight loss procedures. Lipolysis has gained popularity due to a study conducted by DiBernardo *et al*. (2009) where lipolysis was found to have significantly higher mean size shrinkage and skin tightening when compared to traditional liposuction. **Conclusions:** As radiology's most innovative branch, IR has a broad landscape; thus, it is at an advantageous position to expand into the emerging field of cosmetic medicine. Cosmetic IR offers equal value with no surgical scar, shorter recovery and lower morbidity when compared to open surgery. Advances developed by IR has dramatically changed medicine. In the near future, it will do the same for cosmetic medicine by creating both new and enhancing existing techniques through image guided approach in order to deliver optimal patient care.

P102

Special Phantom for Ultrasound Interventional Training Construction, Advantages and Application

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Background: Training on patients causes more pain, complication, cost and time with possible technical problem e.g. non-targeted organ biopsy. Alternatives. Simulation provide safe training more adherent to ethical issues. This poster show a simple low cost gelatin phantom for training with easy construction and many advantages. **Methods:** Using gelatine with special formula adjusted to obtain echogenicty similar to human tissue with minimized needle pass artifact. New technique for biopsy phantom is demostrated with many advantages in controlling target echogenicity and posterior shadow to simulate any suggested target. **Results:** The produced phantom is extremely helpful to the IR trainners who need to avoid patient harm and increase skills of puncture and targeting for biopsy. It also have the advantages of low cost and avilable ingradients with construction step by step demonstration. **Conclusions:** Safe low cost IR training is feasible by this special formula simulating human echogenicity with reduced needle pass artifact.

P103

Evaluation of the Causes of Erectile Dysfunction in Patients Undergoing Invasive Penile Doppler Sonography: A Study of Adult Pakistani Population

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Background: In patients with erectile dysfunction it is important to differentiate psychogenic from organic causes. Color Doppler sonography of penis is a relatively inexpensive and partially invasive tool for this purpose. This study was conducted to evaluate the causes of erectile dysfuction in the adult population of Pakistan, who underwent penile doppler sonography. **Methods:** This retrospective cross sectional study was conducted at the Dow Institute of Radiology, Dow University of Health Sciences, Karachi, Pakistan. All consecutive patients presenting with the complaints of erectile dysfunction and undergoing penile doppler sonography from July, 2014 till June, 2016 were included in this study (n = 97). The examination was performed by a radiologist with more than five years experience in small parts ultrasonography. All examinations were performed on GE Voluson S6 and GE Logiq P5 with a high frequency probe. Following baseline scans, intracavernosal injection of 20 µg of prostaglandin E1 was given close to the base of penis. Peak systolic velocity and end diastolic velocity were measured in each cavernosal artery at the interval of 5 minutes. Patients with a peak systolic velocity of less than 25 cm/sec were considered to have arterial insufficiency. A greater than 5 cm/sec end diastolic velocity was used to describe venous incompetence. Erection grading of penis at the interval of ten minutes was done by erection hardness grading score. **Results:** Out of 97 patients (mean age 37.09 ± 11.59 years; range 19-69); 50 (51.5%) patients had normal penile Doppler sonographic findings, 24 (24.7%) had arterial insufficiency, 15 (15.5%) had venous leak, while 8 (8.2%) patients had arterial insufficiency with venous leak. **Conclusions:** Penile doppler sonography is a useful tool for evaluation of causes of erectile dysfunction. The majority of studied Pakistani individuals demonstrated no organic cause, thus conforming to the high prevalence of psychogenic etiology.

P104

Awareness Regarding Radiation Protection Among Residents and Technologist Working in Vascular Interventional Radiology Department: A Multicenter Study from Pakistan

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Background: To determine the level of knowledge regarding radiation protection among residents and technologist working in vascular interventional radiology department. **Methods:** A survey was conducted regarding radiation protection from March 2016

to November 2016 at tertiary care hospitals of Karachi, Pakistan. A structured questionnaire was distributed to 65 participants. The questionnaire was divided into 2 sections. In the first section, demographic information of the participants was included. In the second section, 6 questions regarding radiation protection were included. **Results:** Out of total 65 participants, males were predominantly higher 51 (78%) as compared to females 14 (22%) [Median age 37 (28-42)]. Majority of the participants 43 (66%) were residents while 22 (34%) were technologists. Awareness for evaluation of personal dosimeter data and radiation protection tool was found to be higher 55 (85%) followed by disease caused by radiation damaged 48 (74%), tissue most susceptible to injury from ionizing radiation 40 (62%), knowledge about dose optimization 34 (52%), standard about radiations 29 (45%) while only 14 (22%) were susceptible to radiation damage. **Conclusions:** The findings of our study have showed considerably low knowledge in our studied participants. In particular, technologist working in VIR department should be trained through regular educational seminar.

P201

Artificial Ascites a Problem-solving Technique in Primary Hepatic Tumor Radiofrequency Ablation

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Background: Primary liver malignancies are not uncommon especially in Egypt due the high prevalence of virus B and C. Treatment options include surgical option (transplantation, hepatectomy) and less invasive option (RF, microwave, TACE and TARE). RF is a very good treatment option which is equivalent to hepatectomy yet less invasive in patient with lesions less than 3 cm (Barcelona Clinic Liver Cancer, 2016). RF is avoided when the lesion is near bowel or in the liver dome hidden by the lung. Artificial ascites is considered as valuable problem solving technique for these limitations. **Methods:** Before ablation of 21 peripherally located hepatic tumors near adjacent bowel, intra peritoneal infusion of adequate amount glucose 5% using 18 G needle aiming for adequate tumor bowel separation to avoid thermal injury of gastrointestinal tract. **Results:** Technical success with was done adequate separation in more than ninety percent of the patient with safe tumor ablation. One patient with failure of separation which was likely attributed to peritoneal adhesion subsequent to previous surgery. No serious complication. None of the patient required post operative diuretics. **Conclusions:** Production of artificial ascites is a safe technique with no major technical complication nor post operative thermal bowel injury or adhesions. It is safe effective technique to feasible delivery of radiofrequency ablation of hepatic tumor near gastrointestinal tract avoiding major surgery in lesion less that 3 cm (hepatectomy).

P202

Value of Rectal Spacing in Cancer Prostate Management Plan

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Background: Prostate cancer is third most common malignancy (National Cancer Institute, 2016). In 2013, there were an estimated 2,850,139 men living with prostate cancer in united states (National Cancer Institute, 2016). Treatment options include surgical option (total prostatectomy) and less invasive radiotherapy option (three dimensional conformal radiotherapy 3D CRT and intensity modulated radiotherapy IMRT). Radiotherapy is an effective treatment option which is equivalent to prostatectomy yet less invasive (National Comprehensive Cancer Network, 2016). Rectal toxicity is one of the most limiting factors for radiotherapy because of rectal tolerance dose. Rectal spacing is considered as valuable problem solving technique for these limitations. **Methods:** Before the radiotherapy planning of 12 patients, rectal spacing was done by hydrogel using 18 G needle aiming for adequate rectal separation targeting 10-20 mm to avoid radiation rectal injury. **Results:** Technical success with adequate rectal separation was done in all patients. No serious complications. None of the patient required post procedural care. Radiation dose was delivered with decreased rectal manifestation and toxicity. **Conclusions:** Injection of rectal spacer is a safe technique with neither major technical complication nor post operative radiation gastrointestinal injury (rectal toxicity). It is a safe effective technique to deliver higher required radiation dose compared to convention radiation dose for better control cancer prostate avoiding major surgery (prostatectopmy) with reduced risk of rectal toxicity.

P203

Flouroscopy-guided Percutaneous Hydrodissection for Radiofrequency Ablation of Hepatic Malignancies Involving the Liver Capsule: Evaluation of Technical Success and Safety

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Background: Radiofrequency ablation is a widely recognized procedure for local control of unresectable primary or metastatic cancer of the liver. Hydrodissection under ultrasound guidance has emerged as a common technique to protect adjacent tissues from RFA related thermal damage. This study was undertaken to evaluate the technical success and safety of fluoroscopy-guided percutaneous hydrodissection for hepatic malignancies abutting the liver capsule. **Methods:** A total of 60 patients were treated with ultrasound-guided percutaneous RFA from January 2011 to July 2016 at our institute. Fluoroscopy guided percutaneous hydrodissection was performed in 15 patients (6 males, 9 females; age range, 42-84 years; mean age, 60.9+/- 9.9 years) with 15 hepatic nodules. All these tumors were closely apposed to the liver capsule in the right lobe. An 18 G single wall needle was used to access the peritoneal space and hydrodissection was performed with 5% dextrose in water displacing liver capsule at least 5 mm away from the diaphragm. Two RFA systems with multilined expandable electrodes were used for ablation. The technical success, safety of technique including the early and delayed complications were analyzed. **Results:** The primary technical success rate of percutaneous fluoroscopy guided hydrodissection was 100% (15/15). The mean volume of solution infused for hydrodissection was 736.1 ± 335.9 mL (range, 200-1500 mL). No major complication related to hydrodissection occurred during