

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.

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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 echogenicity similar to human tissue with minimized needle pass artifact. New technique for biopsy phantom is demonstrated 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 trainers who need to avoid patient harm and increase skills of puncture and targeting for biopsy. It also have the advantages of low cost and available ingredients 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.

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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 dysfunction 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.

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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