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

Haytham Mohamed Nasser

Ain Shams University, Cairo, Egypt.
E-mail: Hmnh1980@gmail.com

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

Haytham Mohamed Nasser

Ain Shams University, Cairo, Egypt.
E-mail: Hmnh1980@gmail.com

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

Maham Jehangir, Atif Rana, Sadaf Irshad

Shifa International Hospital, Islamabad, Pakistan.
E-mail: maham.61@hotmail.com

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