

Background: Urinary leakage is uniquely associated with partial nephrectomy (PN) and remains a challenging complication to treat. Recently, minimally invasive percutaneous approach to obliterate the urinary leakage after PN has been developed. **Method(s):** Data of 10 consecutive patients who underwent percutaneous obliteration of urinary leakage after PN using coil and NBCA were reviewed. A urinary fistulography was performed via the drainage catheter previously placed in the urinoma, and a pyelography was performed to locate the fistulous tract. If the fistulous tract was clearly visualized, super-selective embolization of the fistulous tract with coils and urinoma cavity sealing with NBCA were performed. In cases where the fistulous tract could not be clearly visualized, only urinoma cavity sealing was performed. Technical success was defined as complete occlusion of visualized urinary fistulous tract and followed urinoma cavity sealing. Clinical success was defined as control of current urinary leakage and either disappearance or decrease in size of the urinoma on follow-up computed tomography (CT). **Result(s):** In seven (70%) patients who showed obvious urinary fistulous tract, coil embolization of urinary fistulous tract and followed by sealing of urinoma cavity with NBCA was performed. Only sealing of urinoma cavity with NBCA was performed in three patients (30%) who could not visualize the distinct fistulous tract. All of the patients showed gradually decrease in size or complete disappearance of urinoma on follow-up CT without further symptom and sign of urinary leakage during the follow-up period (mean, 44.6 weeks; range, 11-117 weeks). **Conclusion(s):** Percutaneous obliteration of urinary leakage after PN using coils and NBCA is safe and effective. On the basis of the urinary fistulography, assessed by drainage catheter in the urinoma and pyelography, super-selective embolization of fistulous tract with coil and followed sealing of urinoma cavity with NBCA or only sealing of urinoma cavity offer complete occlusion of the urinary leakage.

OC3.3

Combination of Preoperative Ultrasonographic Mapping and Radio-Guided Occult Lesion Localization in Patients with Locally Recurrent/Persistent Papillary Thyroid Cancer a Pilot Study

Amr Maged Elsaadany, Mohamed Alrowaily¹

*Sandwell and West Birmingham Hospital, Birmingham, UK, ²King Faisal Specialist Hospital and Research Center, Riyadh, Saudi Arabia.
E-mail: dramrmaged@hotmail.com*

Background: Better follow-up of patients with thyroid cancer and more sensitive detection leads to detection of recurrences in the neck. Our aim is to explore the feasibility of (ROLL) for radio-iodine negative cervical recurrences from thyroid cancer in patients with previously operated neck compartments to improve the surgical success and reduce the complication rates. **Method(s):** Pre and postoperative thyroglobulin levels and neck US were performed. The results of fine needle aspiration (FNA) cytopathology were available. In the morning of surgery, biopsy proven recurrent/persistent tumoral lesions were injected with Tc-99m labeled macro-aggregated albumin under US guidance. Thyroid bed exploration was carried out based on the location of lesions with the guidance of intra-operative gamma probe and neck map. The lesions showing high count rates were

resected and labeled separately for histopathologic study and to ascertain removal of the radiolabeled lesions. **Result(s):** Total of 13 patients (8 females and 5 males) were included. Technical success rate was achieved in all patients with successful surgical removal of the lesions. All the lesions removed were positive on histopathologic assessment. Significant drop of the TG levels was achieved in all patients. **Conclusion(s):** The ROLL technique is feasible in patients with loco-regional recurrence particularly useful in patients already submitted to cervical dissections and/or with small lesions located in surgically difficult sites. It can therefore have clinical role in the management of cervical recurrences.

OC3.4

Efficacy and Safety of Radiofrequency Ablation for Benign Thyroid Nodules: Initial Clinical Experience in Middle East Area

Kwang Hwi Lee, Hong Dae Kim, Eui Yong Jeon

*Sheikh Khalifa Specialty Hospital, Ras Al Khaimah, UAE.
E-mail: lkh770429@naver.com*

Background: Radiofrequency ablation (RFA) is a minimal invasive treatment modality for variable tumors of liver, kidney, bone etc. RFA has been also used to treat benign thyroid nodules to improve patient's symptoms. However, thyroid RFA has been seldom introduced in middle east area. **Method(s):** A total 58 benign thyroid nodules in 45 patients (M:F= 8:37, mean age: 39 years \pm 12.2) underwent ultrasound (US) guided percutaneous RFA using an internally cooled electrode. We investigated clinical symptom, cosmetic score (4-point scale), composition, thyroid volume. We assessed complications and volume reduction rate (VRR) in follow-up (median: 10 months). **Result(s):** Clinical manifestation was palpable mass (n= 10), discomfort (n=15), dysphagia (n= 16), voice change (n= 1), dyspnea (n=3). Cosmetic score were 3 (n= 25, cosmetic problem on swallowing only) and 4 (n= 20, readily detected cosmetic problem). Composition was predominantly cystic (n= 3), predominantly solid (n= 6), solid (n= 49). Mean initial thyroid volume was 18.13 ml \pm 61.5 (range: 1.12 ~ 208.6). After RFA, mean thyroid volume was 6.07 ml \pm 15.4 (0.16 ~ 75.3). Major complications were not detected. Perithyroid hemorrhage occurred during procedure in 3 patients, and it was spontaneously resolved in a month. All patients reported improvement of their symptoms after RFA. Mean VRR was 70.2% \pm 25.7 (2.6 – 98.8). **Conclusion(s):** RFA is an effective and safe nonsurgical therapeutic method to manage benign thyroid nodules, and it can be widely spread in Middle East area.

OC3.5

Hostile Necks Management: Saudi Experience with Heli-Fx Endoanchors

Samer Koussayer

*King Faisal Specialist Hospital and Research Center, Riyadh, Saudi Arabia.
E-mail: sakous@msn.com*

Background: Most neck challenges comes from short neck which is consider the main exclusion from standard EVAR treatment. CHEVAR and FEVAR are the most common solutions