

IS-21 Radionuclide Hystero-salpingo-graphy (RN.HSG) Dr.M.A.Taher(Nuclear Medicine Centre, P.Box-16, Rangpur,5400,Bangladesh).

Various imaging modalities were compared to confirm patency of fallopian tubes.

Ten infertile women (age range 20-34 yrs.) were studied by Ultrasound, RN.HSG and contrast HSG(X.H). Colloid particles labeled with 0.25-1mCi of ^{99m}Tc were placed into the vagina in lithotomy position (slightly Trendelenburg). Gamma Camera images were obtained.

No adverse reaction was seen. Bilateral tubal block was seen in two patients in both RN-HSG and X-H. Unilateral block is seen in three patients.

RN.HSG is a simple, and safe method.

IS-22 Transdiaphragmatic Leak Complicating

Continuous Ambulatory Peritoneal Dialysis.

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A 66 year old female on continuous ambulatory peritoneal dialysis (CAPD) due to end stage renal disease secondary to diabetic nephropathy is reported. The patient was admitted because of progressive dyspnea, pleuritic chest pain and massive pleural effusion. Poor dialysate return and increasing volume of chest tube aspirate was noted. Radionuclide imaging was done with 100-150 MBq (3-4 mCi) Tc-^{99m} sulfur colloid instilled intraperitoneally with 1.5 L of dialysate via the Tenckhoff catheter. After 15 minutes, the radioactive tracer was observed in the right thorax aside from the expected tracer localization in the abdominal cavity documenting the transdiaphragmatic leak. The left thorax did not indicate any significant amount of radioactivity. Pathophysiology, clinical presentation, predisposing factors, diagnostic modalities and management of transdiaphragmatic leak, a relatively rare complication of CAPD, is presented.

IS-23 Pressure assisted Technegas ventilation Imaging of comatose patients

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Ventilation of patients with Technegas is routinely available for those patients breathing spontaneously. There is a demand for patients on life support systems to have this procedure performed. Hence a simple "Positive Ventilation Delivery System" (PVDS) was developed for these patients, and for use with patients who are unco-operative by reason of age or infirmity. The PVDS is driven by the hospital oxygen supply, uses a standard 4L anaesthetic bag, a manifold which limits the incoming oxygen pressure to 2.7cm water head, and a series of one-way valves. It mounts on the rear of the Technegas generator, and can be brought into service within a minute of producing Technegas. Some examples of ventilation images obtained with the PVDS will be shown.

IS-24 ^{99m}Tc -Technegas scintigraphy in panlobular emphysema

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^{99m}Tc -Technegas imaging is being used for ventilation scintigraphy. Two patients with panlobular emphysema were examined. Technegas images clearly showed the peripheral defect and hot spot formation. On CT, panlobular emphysema appears as large and extensive areas of uniform low attenuation. However CT assessment is difficult because of no striking density difference exists between affected lobules and the homogeneous background of normal pulmonary parenchyma. Technegas scintigraphy appears to be useful for assessment of panlobular emphysema which is difficult to be differentiated from normal on CT.

IS-25 Comparisons Of Tc-^{99m} -Tetrofosmin And Tl-201 In Detecting Thoracic And Lung Tumors.

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This study is designed to assess the usefulness of Tc-^{99m} -tetrofosmin (TFN) in detecting thoracic and lung tumors and the results are compared with those of Tl-201.

Total 23 lesions in 15 patients are included. All tumors are histologically proved except the lymphnodes which are confirmed by CT as enlarged nodes in lung carcinoma. All patients have undergone dual isotopes (TFN and Tl-201) SPECT acquisition at 10 minutes and 3 hours after the injection of both tracers. Corresponding slices from both TFN and Tl-201 reconstructed images are compared visually for the detectability of lesions. For semiquantitative analysis early (EUR) and delayed uptake ratio (DUR), retention index (RI) and washout rates (WR) are calculated by drawing ROIs on the lesions and in normal lung and the results are compared with each other.

All lesions are detected by both the tracers. No significant differences are observed between the parameters of TFN and Tl-201 except WR.

TFN may be a useful tracer for the detection of thoracic and lung tumors.