Examination protocol: All patients received a peritumoural injection of 111 MBq (3mCi) of 99mTc-HSA-nanocolloid in 1 - 3 ml. 2 h later 300 seconds anterior and lateral thoracic scans were obtained. A 57-Co flood phantom was positioned back to the patient to outline the anatomical contour and help to localize SN. SN was marked on the skin with permanent ink. Intraoperative SN localization was performed using a gammaprobe. Histopathologic analysis of SN was done with Haematoxylin/Eosin, inmunohistochemistry and PCR. Histopathology of the SN was compared to the histopathology of all the other lymph nodes drawn out by the surgeon.
RESULTS: SN were identified by lymphoscintigraphy in 227 cases of 250 (91%).
221 of them (97%) were localised in axyla. In 210 of 221 SN could be localised and drawn out at surgery.
The no detection and false negative rate were much higher in patients aged > 60 (29 and 33 %) and in tumours > 30 mm (32 and 19 %) than in patients <40 (14 and 0 %) or tumour < 10 mm (15 and 0 %). Crossing age and size data disclosed that the highest no detection rate appears in patients > 60 y and tumours > 30mm (46 %) and the highest false negative rate appears in patients >60 and tumours > 30 mm (33 %)
CONCLUSIONS: 1) No FN were found in patients with tumour size <10 mm. 2) No FN were found in patients aged under 40 years. 3) FN rate seems to be higher in older patients. 4) The age of patients and the size of tumour seem to influence on the SN detection rates.


AT0200398

16.5

Sentinel Lymph Node (Sln) Detection in Vulvar Cancer

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Aim: The purpose of the study is to verify the feasibility of the Sentinel Lymph Node (SLN) procedure in patients with evidence of vulvar cancer.
Methods: We studied 13 women with early stage (T1/T2) carcinoma of the vulva. One day before surgery a lymphoscintigraphy was done. We injected intradermally on average 76 MBq of ^{99m}Tc-labelled human colloides (Albu-Res®) in 0,4-0,6ml NaCl at 4 locations round the tumor regarding the midline. Because of the large particles the colloid was filtered before to obtain the small particle fraction between 200-450nm. Immediately after injection a dynamic scintigraphy was performed with 28 images, 1 minute per frame. Additional we made static images, 5 minutes per image, 30 and 120 minutes after injection. The location of the SLN was marked on the skin. The SLN was intraoperatively identified using a hand-held gamma probe. In every case a complete inguino-femoral lymph node dissection was done.
Results: In all cases we could show one or more (on average 3) SLN by means of lymphoscintigraphy and in 11/13 cases we could detect SLN by using the gamma probe. Lymph channels were seen in 7/13 dynamic studies. 4/13 patients had lymph node metastasis in the SLN (3/4 cases only the SLN and in 1/4 cases the SLN and one additional lymph node were positive). We did not found any tumor-positive non-sentinel lymph node in case of tumor-negative SLN.
Conclusion: The morbidity after operation of patients with vulvar cancer is considerable and related to the groin dissection. The selective SLN-biopsy instead of radical groin dissection is feasible to reduce the morbidity without a loss of staging and prognostic factors. This method

should be restricted to patients with early stage vulvar cancer with clinically uninvolved lymph nodes. Further studies are needed to evaluate the accuracy and clinical validity of this procedure.

16.6

Lymphoscintigraphy and Radioguided Biopsy of the Sentinel Node in Cutaneous Melanoma

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Aim: Lymphoscintigraphy associated with radioguided biopsy of the sentinel node (SN) is well established in clinical practice for melanoma .Metastasis in the sentinel node indicates the need for therapeutic lymph node dissection.The purpose of the present study was to examine the efficacy of lymphoscintilography and the biopsy in detecting metastasis in cutaneous melanoma.
Methods: Third-nine patients with clinically localized melanoma were investigated prospectively. A dose of 21.6-27.0 MBq (800-1000microCi) of 99mTc sulfur colloid was injected intradermally of the primary tumor site .Dynamic images were obtained until 40 minutes. The images were evaluated by two observers .Lymph nodes were identified and removed with the aid of the gamma ray detecting probe (GDP) after 1-2 weeks and undergone pathological analysis.
Results: Lymphoscintigraphy revealed sentinel node in 38 of 39 (97.4%) patients. Sentinel node biopsy detected metastasis in 6 of 38 (15.8%) patients.
Conclusion: The role of lymphoscintigraphy on detecting the sentinel node in cutaneous melanoma is well established and is an important tool in the clinical practice of oncology.

16.7

Comparison of Benzodiazepine Receptor SPECT and ^{18}F-FDG PET Using a Coincidence Detection Camera in Patients with Temporal Lobe Epilepsy: Preliminary Results

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Aim: The aim of this preliminary study was to compare the results of benzodiazepine receptor (BDR) SPECT using ^{123}I-Iomazenil with those of ^{18}F-FDG (FDG) PET obtained on a double-headed gamma camera with a coincidence detection system in patients with temporal lobe epilepsy (TLE).