

There was no significant difference in age ($p=0.917$), educational level ($p=0.851$), or BMI ($p=0.255$) between CAM users and non-users. CAM users and non-users showed no significant difference in trust in conventional treatment ($p=0.374$) or quality of life ($p=0.501$). There was no significant difference in health specific locus of control. Vitamins and minerals were the most common (35.2%) used natural CAM product.

Conclusion: CAM use is common among recently diagnosed breast cancer patients in the Netherlands. Physicians and other health care providers should increase their knowledge about CAM therapies. CAM should be discussed with patients, since CAM may cause clinically significant drug interactions.

5120

POSTER

Is Extracapsular Tumour Spread a Prognostic Factor in Patients With Early Breast Cancer?

E. Dobi¹, F. Bazan¹, A. Dufrense¹, M. Demarchi¹, C. Villanueva¹, L. Chaigneau¹, J.L. Sautière², Y. Maissonnette-Lescot², L. Cals¹, X. Pivot¹. ¹Centre Hospitalier Jean Minjot, Medical Oncology, Besançon, France; ²Centre Hospitalier Jean Minjot, Gynecology, Besançon, France

Background: This study search for extra capsular tumour spread (ECS) as a prognostic factor for recurrence in terms of Disease Free Survival (DFS) and Overall Survival (OS). ECS is rarely taken into account in large studies, and its prognostic values has been debatable.

Patients and Methods: From a retrospective data base of the Doubs cancer registry, 823 eligible women with node positive breast cancer treated from February 1984 to November 2000 were identified. The following factors were evaluated: ECS, numbers of involved nodes, histological tumour grade, tumour size, status of estrogen and progesterone receptors, and age of patient. A Cox proportional hazards method was used to search for significant factors related to OS and DFS length.

Results: In the multivariate analysis, factors related to DFS length were: tumour grade (aHR 0.76, 95% CI 0.61–0.96, $p=0.02$), ECS status (aHR 0.7, 95% CI 0.49–0.96, $p=0.03$), PgR status (aHR 0.63, 95% CI 0.44–0.85, $p=0.008$), number of nodes involved (aHR 0.75, 95% CI 0.56–1, $p=0.05$). The multivariate analysis for OS found as significant factors: tumour grade (aHR 0.76, 95% CI 0.61–0.95, $p=0.02$) and PgR status (aHR 0.8, 95% CI 0.56–0.99, $p=0.02$).

Conclusions: This study might suggest taking into account ECS status in the adjuvant making decision process.

5121

POSTER

Breast Cancer Radiotherapy: Is Prone Position a Good Method to Protect Organ at Risk?

P. Porcu¹, I. Meaglia¹, P. Tabarelli², M. Liotta², G.B. Ivaldi¹. ¹Fondazione Salvatore Maugeri, Radioterapia Oncologica, Pavia, Italy; ²Fondazione Salvatore Maugeri, Fisica Sanitaria, Pavia, Italy

Background: Postoperative radiotherapy is a fundamental part of the integrated approach to conservative treatment of breast cancer. Prone positioning has been suggested as an alternative to conventional supine position for the patients receiving breast radiotherapy (RT). Our purpose is to compare the adequacy of target coverage, dose homogeneity and volume of organs at risks (OARs) in the treatment of the whole breast in supine and prone position.

Methods and Materials: Between 07/2010 and 03/2011, 30 early stage left breast cancer patients were referred to our department to receive whole breast RT after conservative surgery. Median age was 52 (range 37–76). Two commercial immobilization devices each specific for supine and prone breast RT were used. Treatment plans with opposing tangential fields (6/15 MV) were performed in both position for each patient according to ICRU criteria. Prescribed dose was 45 Gy in 20 fractions plus a concomitant electron boost of 5 Gy in 4 fractions (1fr/week). Dose volume histograms (DVH) were generated applying uniform margins for target volumes, contralateral breast, heart and ipsilateral lung in prone vs supine position.

Results: Breast volumes were not significantly different in prone and supine position. Median CTV in supine position was 502cc (range 134–1361) vs 534cc (range 149–1535) in prone position. In supine CTV mean dose (D_{mean}) was 45.1 ± 0.5 Gy and 45.1 ± 0.7 Gy in prone; mean $V_{95\%}$ was 97 ± 1.7 Gy in supine and 91.2 ± 9.5 Gy in prone position. Lung doses were lower in prone position: mean maximum lung distance (MLD) was 1.9 ± 0.6 cm in supine position vs 1.1 ± 0.9 cm in prone position; median $V_{20\text{ Gy}}$ in supine vs prone position was 6.1% (range 0–15.9) vs 1% (range 0–8.4), respectively. However, cardiac doses increased in prone position: a 1.7 ± 0.7 Gy D_{mean} was observed in supine vs 2.4 ± 1.0 Gy in prone position. Median $V_{5\text{ Gy}}$ heart dose in the supine and in the prone patients was 2% (range 0–9.5) and 6.6% (range 0–14.8) respectively. Median D_{max} of 1cc for

contralateral breast was 3.5% (range 0.9–6.1) in supine and 6.4% (range 1.3–12.8) in prone position.

Conclusion: Our experience shows that prone position could decrease lung doses. Heart and contralateral breast do not benefit from that treatment modality. Therefore, prone position is appropriate in elderly patients, patients with prior lung disease as emphysema, BPCO and fibrosis or patients undergoing neoadjuvant or concurrent chemotherapy.

5122

POSTER

Effect of Synchronous Chemo-radiation on Quality of Life: Results From the SECRAB Trial (ISRCTN: 84214355) Presented on Behalf of the SECRAB Steering Committee

I. Fernando¹, S.J. Bowden², R.P. Fox², R. Grieve³, A.M. Brunt⁴, R.K. Agrawal⁵, D. Ritchie⁶, P. Simmonds⁷, J. Bishop⁸, D.W. Rea².

¹University Hospitals Birmingham NHS Foundation Trust, Cancer Centre, Birmingham, United Kingdom; ²University of Birmingham, Cancer Research UK Clinical Trials Unit, Birmingham, United Kingdom; ³University Hospital, Arden Cancer Centre, Coventry, United Kingdom; ⁴University Hospital North Staffordshire, The Cancer Centre, Stoke-on-Trent, United Kingdom; ⁵Shrewsbury and Telford Hospital NHS Trust, Department of Oncology, Shrewsbury, United Kingdom; ⁶Beatson West of Scotland Cancer Centre, Oncology Department, Glasgow, United Kingdom; ⁷Southampton University Hospitals NHS Trust, Southampton Oncology Unit, Southampton, United Kingdom; ⁸Glan Clwyd Hospital, North Wales Cancer Treatment Centre, Rhyl, United Kingdom

Background: SECRAB was a large, prospective, multicentre trial comparing the sequencing of chemotherapy (CT) and radiotherapy (RT) after surgery for women with early breast cancer. Between Jul 98 and Mar 04 2296 women were randomised to synchronous (Syn) or sequential (Seq) CT-RT. The primary endpoint was local recurrence rates. Quality of Life (QoL) was an important secondary endpoint.

Materials and Methods: QoL was measured using standard, validated questionnaires (EORTC QLQ-C30 and QLQ-BR23). QoL scores were calculated for 15 QLQ-C30 and 6 QLQ-BR23 domains assessing functioning and symptoms. QoL questionnaires were completed by patients at baseline (prior to chemotherapy), end of all treatment, 12 and 24 months after surgery. Standardized area under the curve (SAUC) methodology was used to assess QoL over a clinically relevant period of 24 months. SAUC combines longitudinal scores into a single measure on a per patient basis and provides an average score per month, tested across treatment arms using a Mann-Whitney test.

Results: 748 patients from 24 centres agreed to participate in the optional QoL study and completed at least 2 questionnaires. Patients were excluded if there was no baseline questionnaire, only the baseline had been received or if the patient had commenced chemotherapy prior to baseline, leaving 565 evaluable patients (completing 2104 questionnaires). The patient characteristics, follow-up and survival of the QoL sub-set were similar to those of the main study with the exception of CT received (72% vs 54% CMF respectively).

There was no significant difference between the arms in mean observed global QoL scores ($p=0.22$). On average, patients reported >70% global QoL. Similar results were seen for all functioning domains. Fatigue and trouble sleeping were scored highest of all symptom domains with scores >30%. There were no significant differences between the arms in mean observed QoL scores for all functioning and symptom domains. Despite an increase in acute skin toxicity observed in the main study, there was no detrimental effect on breast cancer specific symptoms, as recorded in the QLQ-BR23, for patients receiving Syn CT-RT.

Conclusions: There were no observed differences in QoL between patients treated with Syn CT-RT compared to those treated with Seq treatment. The results of this study would suggest that Syn CT-RT can be given without adversely affecting QoL.

Sponsor: University Hospitals Birmingham NHS Foundation Trust

5123

POSTER

The Accuracy of Ultrasound in Planning of the Tumour Bed Boost in Breast Cancer

M. Azoulay¹, A. Sarfehnia¹, C. Maietta¹, C. Lambert¹, N. Kopek¹, M. David¹, T. Hijal¹. ¹McGill University Health Centre, Radiation-Oncology, Montréal, Canada

Background: To compare the accuracy of ultrasound (U/S) guided tumour bed boost planning to CT based planning in patients with breast cancer receiving adjuvant radiation therapy (RT) after undergoing breast conserving surgery.

Materials and Methods: Tumour bed boost, using U/S guided tumour bed localization, was clinically planned for fifteen consecutive patients.