

of clinical, pathological and treatment characteristics were evaluated with respect to risk on recurrence.

Methods and Materials: Four hundred and three (403) cases of DCIS underwent surgery at the Netherlands Cancer Institute/Antoni van Leeuwenhoek hospital (NKI/AvL) from January 1986 to December 2002. All patients with 'pure' DCIS and no prior history of breast cancer were included.

The clinical and pathological characteristics evaluated were: age, detection method, biopsy method, number of surgical procedures, completeness of excision and histological grade.

The main endpoints of this study were local recurrence, either invasive or non-invasive, metastasis, and breast cancer-specific mortality.

Results: One hundred and sixty five patients (41%) were treated with breast-conserving therapy, 97 (24%) with excision alone, and 68 (17%) with excision plus radiotherapy, and 238 (59%) with mastectomy. Median age was 51.0 years (range: 24–81 years).

At a median follow-up of 5.3 years, 20 events occurred. Eight patients (8.2%) had local recurrence in the excision alone group, 7 patients (10.3%) in the excision plus radiotherapy group and 5 patients (2.1%) in the mastectomy group (4 local and 1 distant). Median time to recurrence was 2.9 years for all groups. Four (1%) patients died of invasive breast carcinoma after recurrence after a mean follow-up of 4.4 years.

Histological differentiation grade of primary tumour and margin status are not equally distributed. The poorly differentiated and margin positive tumours are more present in the excision plus radiotherapy group than in the excision alone or mastectomy group, 62/25% vs. 27/18%, and 51/4% respectively.

Contralateral breast cancer developed in 7 (7.2%), 2 (2.9%) and 12 (5%) cases in the excision alone, excision plus radiotherapy and mastectomy group respectively.

Conclusion: Breast cancer relapse rates in this series are according to generally accepted standards. The differences in risk factors between the three treatment modalities may reflect physician preferences, resulting in a relatively large proportion of patients treated with mastectomy (with either simple or skin-sparing reconstruction).

461

ORAL

Outcome after invasive recurrence in patients with ductal carcinoma in situ of the breast

D.R. Holmes¹, L. Romero¹, L. Klein¹, R. Soni¹, M. Lagios², M. Silverstein¹. ¹University Southern California Norris Comprehensive Cancer Center and Hospital, Breast Surgery, Los Angeles, USA; ²The Breast Cancer Consultation Service, Tiburon, USA

Objective: Local recurrence (both invasive and non-invasive) has always been used as the most important marker of treatment failure for patients with ductal carcinoma in situ (DCIS). As follow-up lengthens, additional endpoints become increasingly important. Chief among these endpoints are distant recurrence and breast cancer specific fatality caused by invasive recurrence.

Methods: A prospective database was used to analyze 1136 nonrandomized patients treated for DCIS. Endpoints included invasive and non-invasive local recurrence, distant recurrence, breast cancer specific fatality and overall fatality. All recurrence and fatality data were 10 year actuarial (Kaplan-Meier).

	Excision + Radiation	Excision Only	Mastectomy
Number of Patients (n=1136)	286	444	406
Total Recurrences (n=129)	51	73	5
Invasive Recurrences (n=57)	26	27	4
Distant Metastases (n=11)	7	2	2
Breast Cancer deaths (n=8)	6	2	0
Average DCIS Size	19 mm	16 mm	43 mm
10-Yr Local Recurrence Rate	18%	30%	1.8%
10-Yr Distant Recurrence Rate	2%	1.2%	1%
10-Yr Breast Cancer Specific Fatality	2%	0.7%	0%
10-Yr Overall Fatality (all causes)	8%	8%	9%

Conclusions: These results indicate that most patients with DCIS who recur can be salvaged, regardless of their initial treatment. For the small subgroup of patients who recur with invasive breast cancer, mortality rate is similar to patients with T1a or T1b node negative (Stage 1) primary breast cancer.

462

ORAL

Ductal carcinoma in situ (DCIS) in elderly women. Results according to treatment

B. Cutuli¹, C. Lemanski², C. Cohen-Solal-Le Nir³, B. De Lafontan⁴, L. Gonzague-Casabianca⁵, H. Mignotte⁶, H. Auvray⁷, S. Giar⁸, C. Charra-Brunaud⁹, P. Quetin¹⁰. ¹Polyclinique de Courlancy, Radiation Oncology, Reims, France; ²Centre Val d'Aurelle, Radiation Oncology, Montpellier, France; ³Centre Huguenin, Radiation Oncology, Saint Cloud, France; ⁴Institut Regaud, Radiation Oncology, Toulouse, France; ⁵Institut Paoli-Calmette, Radiation Oncology, Marseille, France; ⁶Centre Berard, Surgery, Lyon, France; ⁷Centre Perrin, Radiation Oncology, Clermont Ferrand, France; ⁸Centre Lambret, Surgery, Lille, France; ⁹Centre Vautrin, Radiation Oncology, Nancy, France; ¹⁰Centre Strauss, Radiation Oncology, Strasbourg, France

Background: To evaluate the outcome in elderly women with DCIS treated in current clinical practice.

Material and Methods: From January 1985 to December 1996, 1223 women with pure DCIS were treated in 9 French Cancer Centers, by mastectomy (M): 358 (29%), conservative surgery alone (CS): 265 (22%) or conservative surgery with radiotherapy (CS+RT): 600 (49%). 76 (6.2%) women were 70 years old or more (70–75 y: 52; 76–80 y: 17; >80 y: 7), with a 73.3-year median age. The median follow-up for this group was 74.8 months (versus 94 months for the entire cohort). These patients were treated by M: 26 (34%), CS: 18 (24%) and CS+RT: 32 (42%). A family history of breast cancer (BC) was reported in 28% of the cases, and 54% of the lesions were discovered by mammography. 27 out of 76 (35%) lesions were comedocarcinoma subtype.

Results: the 6-year local recurrence (LR) rates were 3.8% (1/26), 22% (4/18) and 0% (0/32) in M, CS and CS+RT groups, respectively (p=NS). Three were in situ LR and two were invasive. No nodal recurrences were observed. Only one woman developed metastases after an invasive LR. Five women developed a contralateral BC and two a second cancer.

Conclusion: Clinical and histological features of DCIS in elderly women are quite similar to those observed in younger women, as well as treatment modalities distribution. CS+RT leads to a particularly excellent local control in elderly patients, as well for DCIS as for infiltrating carcinoma.

463

ORAL

Ductal carcinoma in situ (DCIS) – the role of prognostic indicators in informing treatment and reducing local recurrence

M.G. Wallis¹, K.E. Clements², J.M. Macarthy³, M.R. Lee⁴, G.M. Lawrence⁵, M.E. Wheaton⁶, O. Kearns⁷, H.G. Bishop⁸. ¹University Hospital Coventry & Warwickshire, UK; ²West Midlands Cancer Intelligence Unit, Birmingham, UK; ³University Hospitals Coventry & Warwickshire Nhs Trust, Coventry, UK; ⁴University Hospitals Coventry & Warwickshire Nhs Trust, Coventry, UK; ⁵West Midlands Cancer Intelligence Unit, Birmingham, UK; ⁶University Hospitals Coventry & Warwickshire Nhs Trust, Coventry, UK; ⁷West Midlands Cancer Intelligence Unit, Birmingham, UK; ⁸Royal Bolton Hospital, Bolton, UK

The incidence of Ductal Carcinoma *In Situ* (DCIS) has risen dramatically in the West Midlands since the introduction of the National Health Service Breast Screening Programme (NHSBSP). There is a wide variation in treatment provided to these patients and uncertainty as to the best management policy to follow.

840 cases of DCIS diagnosed during the period 1st April 1988 – 31st March 1999 were identified in 10 breast screening services in the West Midlands. Treatment and follow-up data were collected from hospital case notes and from the West Midlands Cancer Intelligence Unit's cancer registration database. A pathological slide review was undertaken by a consultant pathologist to provide consistent information on diagnostic characteristics. A radiology review of the diagnostic X-ray films was undertaken to gain information on particular radiological characteristics of these patients. 624 cases were identified with a full pathology dataset and 718 cases with a full treatment dataset. The 586 cases with both a full pathology and treatment dataset were then subjected to radiological review. After further exclusions, cases with a full radiology, pathology and treatment dataset were then analysed. Follow-up data were attained for a maximum of 14 years and a minimum of 3 years.

Data will be presented which link the radiological characteristics, pathological findings, treatment methodologies undertaken and resultant outcomes in terms of time to local recurrence. There were 72 recurrences overall of which 54 were local (ipsilateral or bilateral) giving a local recurrence rate of 9.22%. Mean time to local recurrence was 35.65 months and this figure differed depending on margin status, surgical procedure, and