and a lower quality of life, show less compliance, and have longer hospital stays, thus inducing greater costs.

The presentation is based on the one hand on a review of corresponding comorbidity studies from the psycho-oncological research of the past 20 years, and on the other hand on current results from a questionnaire-based study involving more than 1000 breast cancer patients performed at the Institute for Medical Psychology of the Hamburg-Eppendorf University Clinic.

The results indicate a considerable risk of comorbidity for psychological disorders in breast cancer patients. This primarily relates to anxiety disorders and depression, in each of which rates of incidence differing between 10% and 30% have been determined. The frequency of psychological disorders requiring treatment appears to be dependent on numerous factors. In addition to socio-demographic variables, these factors include illness oriented variables such as the stage and prognosis of the illness, the severity of the physical impairment and negative effects on self-perception, as well as psycho-social variables such as the available coping resources, and support from the familial and social environment.

The results show that a qualified treatment of the psychological symptoms (anxiety, depression) is necessary for certain subgroups of breast cancer patients. This can be psychotherapeutic, psychopharmacological, or combined in nature, and requires corresponding specialist training and experience (for example, medical or clinical psychologists or psychiatrists).

A specific problem can be seen however in the fact that the psychological comorbidity in breast cancer patients frequently goes without being recognized by those responsible for primary treatment. This is due in part to the diversity of the psychopathology, the overlapping of somatic and psychological symptoms, the underestimation of psychological disorders in light of dominant physical symptoms, and to the lacking knowledge of the pathology of psychological disorders and their ability to be treated. On this basis, the conclusion can be drawn that oncologists responsible for the primary care of breast cancer patients must be better educated in the diagnosis of psychological comorbidity in the course of their studies and training.

Keywords: Psycho-oncology, psychological comorbidity.

43 INVITED

Psychological response to breast cancer and its impact on survival

L. Fallowfield. *Cancer Research UK, Psychosocial Oncology Group, Brighton, East Sussex, UK*

There have been many attempts over the years to establish the types of pre-morbid personality patterns that either predisposed women to develop cancer or to influence their survival. Findings from much of this early work stimulated considerable interest in the possibility of improving not just the quality but the quantity of women's lives through psychological approaches. In this talk I will briefly review some of the data that both supports and refutes the likelihood that psychological factors influence survival. None of the research findings will impact significantly on most clinicians or clinical care until the complex biological pathways mediating and mind-body interactions are established.

44 INVITED

Who is the patient? Psychological distress of breast cancer couples

L. Baider. *Hadassah University Hospital, Director, Psycho-Oncology Unit, Jerusalem, Israel*

The purpose of this randomized prospective study was to identify factors influencing the psychological distress of breast cancer patients and their husbands during remission. Background variables and distress levels of 172 couples from two populations (Graz, Austria and Jerusalem, Israel) were assessed, using three standardized instruments, during two time periods 6 to 8 months apart. In both geographic-cultural groups, women whose partners refused to participate reported significantly less perceived family support ($P<0.01$ for Graz; $P<0.05$ for Jerusalem). It may be suggested that partner participation serves as an indication of how patients appraise their own perception of family support. The Grand Severity Index (GSI) (measuring total psychological distress) reflected minor changes in psychological distress of both patients and husbands over time. Although findings on the relative distress of healthy partners and patients are not always consistent and are mostly restricted to the first years after diagnosis, the majority of studies support a consistent tendency in the relative but similar psychological distress levels of the patient and spouse. Implications for psychological intervention are discussed.

45 INVITED

Psychological intervention with breast cancer patients: an update

Abstract not received.

Wednesday, 17 March 2004 16:00–17:15

PROFFERED PAPERS

Adjuvant and neo-adjuvant therapy

46 ORAL

Efficacy of Pre-operative Arimidex (anastrozole) compared with Tamoxifen (PROACT) as neoadjuvant therapy in postmenopausal women with hormone receptor-positive breast cancer

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Background: In selected patients both cytotoxic and endocrine treatments (eg tamoxifen) given for a short period prior to breast cancer surgery have been shown to cause tumour shrinkage. This enables mastectomy, where a tumour was previously considered inoperable, or breast conserving surgery (BCS) when only a mastectomy was feasible prior to treatment.

Materials & Methods: The PROACT trial evaluated the efficacy of anastrozole (AN) versus tamoxifen (TAM) as neoadjuvant therapy in postmenopausal women with large, operable or potentially operable, locally-advanced, hormone receptor-positive breast tumours. Patients were randomised to double-blind treatment for 12 weeks prior to surgery. Additional chemotherapy was optional and was decided prior to randomisation. The primary objective was a comparison of objective response (OR) rates as assessed by ultrasound at 12 weeks. Secondary objectives included changes in both planned and actual surgery (inoperable at baseline to mastectomy/BCS, or mastectomy at baseline to BCS) from baseline to 12 weeks and tolerability.

Results: 451 patients (mean age 67 years) were randomised to treatment with AN (n=228) or TAM (n=223). At baseline, 14.2% of the patients had tumours assessed as suitable for BCS, 78.3% for mastectomy and 7.3% had inoperable tumours. OR rates by ultrasound are shown in table 1.

Table 1

Patient population	N	OR (% patients)			
		AN	TAM	Odds ratio (95%CI)	P value
All patients	451	39.5	35.4	1.24 (0.84–1.83)	0.29
Hormonal therapy only	314	36.2	26.5	1.57 (0.97–2.55)	0.07
Hormonal therapy +*	262	36.6	24.2	1.81 (1.06–3.11)	0.03

*Also requiring mastectomy/inoperable at baseline.

Considering those patients receiving hormonal therapy alone, more of the AN than TAM treated patients had an improvement in their planned surgical option (47% versus 38% respectively, 1.44 [0.88–2.36] p=0.15) and significantly more of the AN treated patients had an improvement in their actual surgery (43% versus 31% respectively, 1.69 [1.01–2.81] p=0.04). Both treatments were well tolerated.

Conclusions: AN is an effective and well-tolerated neoadjuvant treatment for postmenopausal women with hormone receptor-positive breast cancer whose large tumours necessitate a mastectomy or who have locally-advanced, inoperable disease. These data are consistent with previous findings for AN.

47 ORAL

Anastrozole versus tamoxifen as neoadjuvant therapy for oestrogen receptor-positive breast cancer in postmenopausal women: the IMPACT and PROACT trials

I. Smith[1], L. Cataliotti[2]. *On behalf of the IMPACT and PROACT Trialists.* [1]*Royal Marsden Hospital, London, UK;* [2]*University degli Studi di Firenze, Firenze, Italy*

Background: Two large trials have evaluated anastrozole (AN) vs tamoxifen (TAM) as neoadjuvant therapy in postmenopausal women with hormone-sensitive breast cancer. In contrast to most previous randomised neoadjuvant trials, patients eligible for breast-conserving surgery (BCS) at entry were included. The PROACT (PReOperative Arimidex (anastrozole) Compared with Tamoxifen) trial (N=451) evaluated AN vs TAM, while the IMPACT (IMmediate Preoperative Arimidex, tamoxifen or Combined with Tamoxifen) trial (N=330) compared AN vs TAM alone and in combination.