ALEXANDRIA CENTERS EXPERIENCE IN THE EXTENDED ADJUVANT HORMONAL THERAPY IN BREAST CANCER

Mohamed Farouk Moustafa, Abdelaziz Maamoun Belel, Maher Mohamed Saber Soliman, Maie Mohamed Mokhtar Elserafy

Department of Oncology and Nuclear Medicine, Faculty of Medicine ,University of Alexandria, Egypt

Introduction

Breast cancer (BC) is the most common and second-leading cause of mortality among female cancers. Endocrine therapy (ET) has been recognized as a substantial and successful adjuvant therapy for women with HR+ early-stage breast cancer. Adjuvant ET is suggested for ER+ patients to improve OS and reduction of breast cancer recurrence. The treatment of choice for women before and after menopause is tamoxifen therapy for five years. Combinations of AIs with tamoxifen are one of the newer alternative therapy regimens that have evolved in the previous few decades. In major randomized studies of postmenopausal individuals, adjuvant treatment with AIs (letrozole, anastrozole, or exemestane) for 5 years (instead of tamoxifen) or for 2-3 years after 3-2 years of tamoxifen increased disease free survival compared to tamoxifen alone. Additionally, the length of treatment is crucial since side effects such as hot flashes, bone pain, bone density loss, arthropathy, depression, and exhaustion may occur with adjuvant endocrine therapy. Testing the safety and efficacy of extended adjuvant hormonal therapy for hormone receptor positive breast cancer patients was the driving force for this study.

Aim of the work

To retrospectively assess the efficacy and toxicity of extended adjuvant Hormonal therapy in hormone receptor positive breast cancer patients includes: Disease free survival including local recurrence and distant metastases. Complications related to the treatment.

patients and Methods

Retrospective study includes review of the records of 1000 female patients above 18 years with hormone receptor positive breast cancer who presented to Alexandria Clinical Oncology and Nuclear Medicine Department, Alexandria Main University Hospital and Ayady Elmostakbal hospital and managed by extended adjuvant Hormonal therapy during the period from January 2013 to December 2017. Women in the study were adherent to the adjuvant hormonal therapy and treatment was not interrupted. Patients who interrupted the treatment or missed follow up were excluded from the study

Results

Deep vein thrombosis (DVT), vaginal bleeding, endometrial hyperplasia, osteopenia and fracture were significantly higher at 10y than 5y and 7 y. Recurrence and distant metastases were significantly lower at 10y than 5y and 7 y.

Table (1): Table1: Duration of treatment of the studied patients

		N=1000
Duration of tretment	5 y	188 (18.8%)
	7 y	302 (30.2%)
	10 y	510 (51%)

Table (2): Complications of the studied patients

		5 y (n=188)	7 y (n=302)	10 y (n=510)	P value
DVT	Yes	5 (2.66%)	26 (8.61%)	66 (12.94%)	<0.001*
	No	183 (97.34%)	276 (91.39%)	444 (87.06%)	
Vaginal bleeding	Yes	8 (4.26%)	34 (11.26%)	101 (19.8%)	<0.001*
	No	180 (95.74%)	268 (88.74%)	409 (80.2%)	
Endometrial hyperplasia	Without atypia	6 (3.19%)	36 (11.92%)	120 (23.53%)	<0.001*
	With atypia	0 (0%)	0 (0%)	0 (0%)	
	No	182 (96.81%)	266 (88.08%)	390 (76.47%)	
Osteopenia	Yes	6 (3.19%)	22 (7.28%)	88 (17.25%)	<0.001*
	No	182 (96.81%)	280 (92.72%)	422 (82.75%)	
Fracture	Yes	4 (2.13%)	15 (4.97%)	49 (9.61%)	<0.001*
	No	184 (97.87%)	287 (95.03%)	461 (90.39%)	

DVT, vaginal bleeding, endometrial hyperplasia, osteopenia and fracure were significantly higher at 10y than 5y and 7 y (P<0.001). In Women received tamoxifen,endometrium was continuously thickened in proportion to duration of therapy, while it remained unchanged in women received anastrazole. Most common histological finding was proliferative endometrial hyperplasia, most changes were not serious. There was no case of endometrial cancer in the study.

Figure (1): Distant metastases of the studied patients

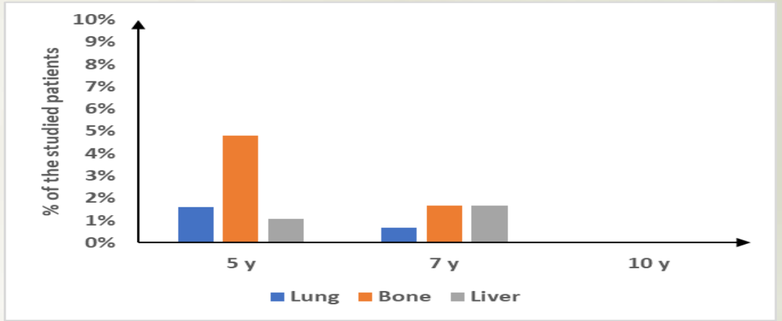

Table (3): Local recurrence on chest wall, regional recurrence and distant metastases of the studied patients

		5 y (n=188)	7 y (n=302)	10 y (n=510)	P value
Local recurrence on chest wall	Yes	6 (3.19%)	1 (0.33%)	0 (0%)	<0.001*
	No	182 (96.81%)	301 (99.67%)	510 (100%)	
Regional recurrence	Axillary lymph node	2 (1.06%)	2 (0.66%)	0 (0%)	0.027*
	Supraclavicular lymph node	2 (1.06%)	1 (0.33%)	0 (0%)	
	Contralateral breast	1 (0.53%)	0 (0%)	0 (0%)	
	No	183 (97.34%)	299 (99.01%)	510 (100%)	
Distant metastases	Lung	3 (1.6%)	2 (0.66%)	0 (0%)	<0.001*
	Bone	9 (4.79%)	5 (1.66%)	0 (0%)	
	Liver	2 (1.06%)	1 (1.66%)	0 (0%)	
	No	174 (92.55%)	294 (97.35%)	510 (100%)	

Conclusion

Patients with breast cancer who had extended adjuvant hormonal therapy had a reduced risk of recurrence and distant metastases, indicating its effectiveness. However, DVT, vaginal bleeding, endometrial hyperplasia, osteopenia and fracture were significantly higher.