Geneva between 2003–2005. For 460 (41%) information on weight and length could be retrieved from medical files. We calculated Body Mass Index (BMI) as weight/length^2. We compared diagnostic characteristics (stage at diagnosis, palpability of primary tumor and axillary lymph nodes, use of mammography, ultrasound, MRI) between obese women (BMI $\geqslant$ 30, n = 86) and women with normal or low weight (BMI $\leqslant$ 25, n = 252) using multivariate logistic regression analysis adjusting for all other factors univariately associated with obesity.

Results: Obese breast cancer patients, who were more likely to be postmenopausal and of lower socio-economic status, presented significantly more often with stage 3−4 disease (adjusted Odds Ratio [OR_{adj}] 1.8, 95% CI: 1.0−3.3, p = 0.049). Tumors $\geqslant$1 cm were significantly more often impalpable in obese patients than in normal weight patients (OR_{adj} 2.4, 95% CI 1.1−5.3). Obese women with impalpable axillary lymph nodes had a higher risk of extensive lymph node involvement (pN2, pN3) as compared to leaner ones (OR_{adj} 8.3, 95% CI: 1.7−39.3). During diagnostic work-up, obese patients were less likely to undergo ultrasound (OR_{adj} 0.5, 95% CI 0.3−0.9) and MRI (OR_{adj} 0.3, 95% CI 0.1−0.6). When performed, ultrasonic examination was more likely to be non-suspect in obese patients (OR_{adj}, 3.6, 95% 0.7−20.8).

Conclusion: Diagnostic work-up of obese breast cancer patients is a medical challenge, since primary tumors as well as axillary lymph nodes are more difficult to detect clinically. In addition, obese breast cancer patients tend to receive less complete diagnostic work-up. These findings may partly explain the unfavorable stage at diagnosis of obese breast cancer patients and provide windows for improvement.

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The inflammatory breast cancer – Moroccan experience

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Background: The inflammatory breast cancer (IBC) is the most aggresive subtype of non metastatic breast cancer.

It is a rare cancer in North America and Europe (<3% of all breast cancer) whereas this rate is greater in North Africa (6 to 10%).

The aim of this study is to determine the epidemiological profile of IBC in Morocco across the experience of the national institute of oncology (INO) and to compare it to the other especially with North African series.

Material and Methods: It's one year retrospective study including all IBC histologically proved recruited in 2003 in our institution. The therapeutics strategies combined the neoadjuvant chemotherapy based on anthracyclines regimen (AC60 4 to 6 cycles) followed by surgery and radiotherapy in localised disease and exclusive chemotherapy in metastatic setting.

Results: 51 cases of IBC from a total of 940 breast cancer were recruited in 2003 (6.2%). This rate is higher than Eastern countries rates but less than the first historical Tunisian serie previously reported, where this rate was about 30%.

The median age was 49 years range: [29 to 78], histologically SBR III was the most frequent (55%), 45% for SBR II. 60% of patient was hormones receptors positives whereas the HER test was not systematically done.

Lymph nodes were involved in most cases (47/51) and over 27 patients had N2/N3 status. 23 patients (46%)had metastatic sites at diagnosis (lung = 14, liver = 8, bone = 5, brain = 1).

Concerning the treatment, the clinical response rate for chemotherapy was 80% (all partial response) without any complete pathological response after mastectomy.

The outcome was poor, from 28 non metastatic patients only 4 were alive three years after diagnosis (14%).

Conclusion: The part of IBC from all breast cancer is our country is higher than the eastern countries but less than the first Tunisian study (due certainly to the confusion between locally advanced breast cancer and IBC) and similar to recent North African studies (6.6% for Tunisia and 6.4% for Algeria).

Although the recent progress in medical management of breast cancer, the prognostic of IBC is still dismal.

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Relationship of serum carotenoids with the risk of breast cancer in Korean women

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Background: Some antioxidant vitamins are known to be important cellular antioxidants in humans and to inhibit a relatively early stage in carcinogenesis. The relationship of serum concentration of carotenoids and the risk of breast cancer was investigated in a case-control study in Korean women.

Material and Methods: This study was carried out with 440 breast cancer patients and 269 control subjects from Jan 2006 to Dec 2006. The serum concentration of β-carotene, lycopene, zeaxanthin + lutein, and retinol were measured simultaneously by a reverse phase, gradient HPLC system. A 46-item semiquantitative food frequency questionnaire and data about breast cancer risk factors were collected. Serum vitamins levels were stratified into quintiles and the relationships of serum cartotenoids to breast cancer risk were evaluated by logistic regression.

Results: After controlled various factors, including age, body mass index, smoking, and alcohol drinking, β-carotene had an increasing risk of breast cancer with increasing serum vitamin level. Crude and multivariate odds ratios for highest quintile compared with lowest quintile were 1.70 (95% CI; 1.17−2.46, p for trend = 0.012) and 1.57 (95% CI; 1.07−2.31, p for trend = 0.047). Lycopene and retinol had decreasing risks of breast cancer with increasing serum vitamin level. Crude and multivariate odds ratio were 0.64 (95% CI; 0.44−0.93, p for trend = 0.018) and 0.65 (95% CI; 0.04−0.95, p for trend = 0.017) for lycopene, 0.53 (95% CI; 0.36−0.78, p for trend = 0.0003) and 0.55 (95% CI; 0.37−0.81, p for trend = 0.0013) for retinol. However, there was no association with serum level of zeaxanthin-lutein and breast cancer risk.

Conclusions: Our results indicated that among carotenoids, serum levels of lycopene and retinol decreased breast cancer risk in Korean women. However, serum level of β-carotene increased breast cancer risk. Additional large-scaled, population based study is necessary to confirm the relationship of antioxidant vitamins to breast cancer risk.

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No association between serum 25-hydroxyvitamin and breast cancer

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Background: There is increasing evidence that vitamin D may protect against breast cancer. 1,25-Dihydroxyvitamin D [1,25(OH)2D] promotes differentiation and apoptosis, and potently inhibits proliferation of malignant breast epithelial cells in culture. We investigated the possible association between circulating 5-hydroxyvitamin D [25(OH)D] and breast cancer progression by comparing serum vitamin D in patients with DCIS, early breast caner, and advanced breast cancer.

Materials and Methods: From June 2006 to December 2006, circulating levels of 25(OH)D were measured in 311 Korean women with breast cancer at Asan Medical Center: 38 with DCIS, 208 with early stage breast cancer (stage I or II), and 53 with advanced breast cancer (stage III or IV). DCIS (Q1), early breast cancer (Q2), and advanced breast cancer (Q3) were compared with regard to serum vitamin D and the relationship between serum 25(OH)D and estrogen receptor, progesterone receptor, P53, and C-erb B2 were evaluated. The study was adjusted for age, body mass index, and bone mineral density.

Results: Mean serum 25(OH)D of Q1, Q2 and Q3 group were 29.34$\pm$19.26 nmol/l, 31.32$\pm$15.22 nmol/l, and 34.32$\pm$17.07 nmol/l (p = 0.315), respectively. They were not significantly different among groups and were not correlated to ER, PR, P53, and C-erbb2 expression.

Conclusions: Unlike some previous reports, we found no significant association between serum vitamin D levels and breast cancer stages. To clarify the role of vitamin D in the progression of breast cancer, further study on association of intracellular or tissue levels of 1,25(OH)2D and 25(OH)D with breast cancer will be needed.

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Survival of breast cancer in women under 35 years

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Study objective: To study survival of breast cancer in young age women under 35 years over the 2000–2005. To relate recurrence rate and survival to risk factor as lymph node involvement, and Estrogen and progesterone status.

Design and Setting: Non-randomized retrospective study in patients with breast cancer confirmed by biopsy in Oncology department in Tripoli medical center. Tripoli – Libya.

Patients: Five hundred fifty-two patients were seen, 93 patients less than 35 years representing 16.8% were included in this study in the period between January 2000, and December 2005.

Results: Patients below 35 years of age represent 16.8% of our total patients. Their stages were not different from older patients. stage I (1.1% vs. 3.2%), stage II (38.7% vs. 44%), stage III (37.8% vs 32.6%), and stage IV were (11.8%vs. 10.2%) (P $\geqslant$ 0.05).

No difference in tumor grade.