after (on the average) 78 months. In the obesity group (20% of patients) cancer of the second breast was diagnosed after 46 months, that is 30 months earlier than in the normal body weight group patients.

Conclusions: Patients after breast cancer treatment should be advised to keep a normal body mass index. Doing that may reduce the risk or may delay the development of contralateral breast cancer.

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Parity and breast feeding are preventive measures for breast cancer in Iranian women

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Background: Breast cancer is the most prevalent cancer in Iranian women and the second cause of cancer related death after stomach cancer. Many factors are defined as preventive or predicting factors for it. Among them the parity and breast feeding are controversial issues. We conducted this case control study to find out the relation of parity and breastfeeding with breast cancer.

Material and Methods: The numbers of case and control group were 376 and 425 patients. A structured questionnaire that covered demographic criteria and breast cancer risk factors were filled up for each group. The two groups were matched by demographic variants, some reproductive issue and socioeconomic status. Odds ratio and 95% confidence intervals were computed as measures of association from the logistic models.

Results: Comparing ever vs. never breast feeding showed that it is significantly protective against breast cancer (P-value=0.0001, OR = 0.39, CI = 0.27–0.56). The trend of breastfeeding was significantly protective; this effect was essentially present in mothers who had breastfed until 48 months. To find out a meaningful duration with an effective cut of point, we calculated the effect of breastfeeding for a child comparing two period of less than 18 months and equal or more than 18 until 24 months, which statistically was significant (p-value=0.037, OR = 0.7, CI = 0.5–0.98) for duration of 18−24 months per child.

Conclusions: Base on the hypothesis of anatomical and physiological change in breast during pregnancy, parity and breastfeeding; we showed that full term pregnancy and parity significantly reduced the risk of breast cancer, the number of children should be limited to 1−3, and the best cumulative duration of breastfeeding is 25−36 months, never breastfeeding is a great risk comparing with ever breastfeeding. The duration of 18−24 months of breastfeeding per child was the best duration and most effective against breast cancer among Iranian women.

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Prevalence of TP53 germ-line mutations in patients with early-onset breast cancer and different types of family history

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Background: Mutations in BRCA1, BRCA2, and TP53 genes underlie familial and early-onset breast cancer, conferring a lifetime breast cancer risk of 43−85%. We aimed to estimate the contribution of TP53 germ-line mutations to early-onset breast cancer (age ⩽35 years) and to establish use of family history in identification of mutation carriers.

Materials and Methods: We analyzed 41 women with breast cancer (BC) diagnosed before the age of 36 years and a negative result for the BRCA1 and BRCA2 genes (analyzed by direct sequencing and MLPA). Patients were classified according their family history in three groups: A) no family history of cancer (n = 11); B) family history of breast/ovarian cancer (BC/OC) (n = 22); C) family history of other neoplasms (pancreas, kidney, brain, leukemia) without fulfilling the classical Li-Fraumeni criteria (n = 8).

The 11 exons of TP53, including the 5′UTR, 3′UTR, and the intron-exon boundaries were PCR amplified and directly sequenced. The analysis of large rearrangements was done by MLPA.

Results: Among the 41 women we identified two (4.8%) deleterious mutations, and both were observed in group C: c.375G>A in exon 4 (splicing mutation) and c.524G>A in exon 5 (p.R175H).

Conclusions: These preliminary results suggest that, after a negative result in the analysis of the BRCA1 and BRCA2 genes, TP53 mutations may play a relevant etiological role in the genetic predisposition of early onset BC, especially in those families with presence of different neoplasms.

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Breast cancer wait times: the journey from detection to adjuvant treatment

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Background: Wait times for breast cancer patients consist of three components: waits from detection to diagnosis, diagnosis to surgery, and surgery to treatment (systemic and locoregional). There is considerable literature on this third component, especially regarding waits to radiation therapy. We set out to document the first two pre-operative components. Additionally, with the evolution of prognostic and predictive makers and advanced imaging, we anticipated that there would be potential for further delay.

Materials and Methods: The study is a retrospective review of all adjuvant breast cancer patients referred to The Ottawa Hospital Cancer Centre (TOHCC) in 2008. TOHCC is a large regional centre serving a population of approximately 2 million. 949 patients were referred for breast cancer treatment in 2008, 735 of which were included in the analysis. Dates of screening procedures, biopsies, pathology reports, surgeries and treatment initiation were abstracted from the breast database. Time intervals were calculated for all patients where data was available. Wait time intervals were stratified by referring hospital class (academic, non-academic, or peripheral) and use of pre-operative MRI.

Results: The results were as follows, in medians: screen to biopsy, 18 days; biopsy to surgery, 48 days; surgery to marker report, 24 days; surgery to chemotherapy, 55 days; surgery to radiation, 74 days; surgery to hormone therapy, 58 days. Wait time intervals were compared between academic, non-academic, and peripheral referring hospitals, and were significantly different. Approximately 35 percent of patients had a preoperative MRI. Impact of MRI was highly significant in terms of the number of mastectomies performed, and the length of time to surgery. These data will be comprehensively presented.

Conclusions: Pre-operative waits are substantial and should be considered in evaluation of wait times. Both referring hospital, and completion of pre-operative MRI had significant impacts on wait times.

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A new direction for multidisciplinary care for cancer patients

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Background: Menopausal symptoms are common following treatment for cancer, particularly breast and gynecological cancers. Across all trials of adjuvant endocrine therapy, vasomotor symptoms such as hot flushes are the most common side effect [1]. Up to 20% of breast cancer patients will consider stopping or do actually cease endocrine therapy because of menopausal symptoms [2,3], despite its established role in reducing recurrence. The nature, severity and causes of menopausal symptoms following hormone-dependent cancer are likely to differ from those seen in women with spontaneous menopause and management can be further complicated by the history of estrogen dependent cancer. Long term sequalae of early menopause is an important health issue for young cancer survivors. The management of menopausal symptoms has traditionally been by general practitioners and specialist gynaecologists and consists of supportive care, hormone replacement therapy and symptomatic treatments. Treatment of cancer patients with menopausal symptoms may be more complex as GPs and gynaecologists may be less confident about the potential interaction between cancer, its treatment and menopausal therapies [4]. Oncologists may have limited expertise in managing menopausal symptoms. As a result, there is a greater need for more information on how these symptoms affect women with a prior history of cancer and what long-term health consequences ensue, as well as how best to control them and within what setting.

Materials and Methods: Multidisciplinary management offers many advantages to cancer patients and health care providers. The authors have established a multidisciplinary (MD) research-based public clinic, servicing the entire state of Western Australia and comprised of gynaecologists, breast surgeons, an endocrinologist, oncologists, a psychiatrist, clinical psychologists, a physiotherapist, genetic counsellors, a dietitian and research staff.

Results: This paper presents information about the establishment of this clinical service and describes some of the factors important in developing the Menopausal Symptoms After Cancer (MSAC) service.