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ORIGINAL ARTICLE

Is There any Difference of Climacteric Symptoms between Natural and Surgical Menopause?

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ABSTRACT

Objective: To compare the effects of the natural and the surgical menopause (SM) on climacteric condition.

Materials and methods: This prospective study was conducted from Jan 2008 to Jan 2013 in ZHSWMCH. Initially, 4,000 women were enrolled but finally 1,743 of natural menopause (NM) and 554 of SM were analyzed. All women were aged between 45 and 50 years, and they were of menopause for 1 to 5 years. Ethical and patient's permission was taken. Once enrolled, they were asked questions. The questions were related to menopausal symptoms (MS). Data was collected and analyzed by SPSS software.

Results: Hot flushes, (535 *vs* 290, $p < 0.001$), sweating (344 *vs* 122, $p < 0.001$), poor memory (99 *vs* 65 $p < 0.001$), feeling depressed (335 *vs* 126, $p < 0.001$), dry skin/mucosa (229 *vs* 91, $p < 0.001$), decreased libido (289 *vs* 117, $p < 0.001$), dry vagina (99 vs 65, $p < 0.001$) and urinary complains (59 *vs* 42, $p < 0.001$) were found in SM *vs* NM. Hypertension or cardiovascular disease was more (191 *vs* 92, $p < 0.01$), blood sugar were more (90 *vs* 32, $p \leq 0.001$) and metabolic syndrome are also more (48 *vs* 26, $p < 0.07$) in SM than NM but this did not reach the significance.

Conclusion: Menopausal symptoms are common in both NM and SM. These MS were significantly higher in surgically menopause women and they were troubled more, so we need to be cautious about oophorectomy, and ovarian preservation should be the aim in all benign cases. Of course, we need to assess the risks and benefit where there is risk of ovarian cancer during the time of total abdominal hysterectomy. Both hormone replacement therapy (HRT) (following a risk/benefit analysis) and treatment of osteoporosis may be recommended after surgery to decrease the climacteric symptoms and osteoporosis in women with menopausal symptoms.

Keywords: Climacteric, Natural, Surgical, Menopause.

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INTRODUCTION

Menopause, whether it occurs naturally or surgically, is characterized by menopausal symptoms (MS). The classic symptoms are hot flushes, night sweating, dryness of skin and vagina, loss of libido, poor memory, mood swing and urinary complains. Also, menopause is associated with osteopenia and others like hypertension, raised blood sugar and some metabolic syndrome. These happen due to lack of estrogen which is produced by the ovaries. In surgical menopause (SM), it occurs very abruptly[1] and in natural menopause (NM) it appears slowly over the several years.[2] Controversial issue is whether bilateral salpingo-oophorectomy at the time of total abdominal hysterectomy (TAH) is beneficial or harmful in perimenopausal women.[3] Most evidences showed that there is lower risk of cardiovascular disease (CVD) and osteoporotic fractures in women with preserved ovarian functions.[4] Menopausal symptoms are also expected in SM. There are few data on the clinical and metabolic effects of longer state of hypoestrogenism. We wanted to see the prevalence of MS, bone mineral density (BMD) and metabolic syndrome whether it differs between SM and NM.

OBJECTIVE

To compare the effects of the natural and the SM on climacteric condition.

MATERIALS AND METHODS

This prospective study was conducted from January 2008 to January 2013 in ZHSWMCH. Initially, 4,000 women were enrolled but finally 1,743 of NM and 554 of SM analyzed. All women were aged between 45 and 50, and they were of menopause for 1 to 5 years. Ethical and patient's permission was taken. Once enrolled detailed history, clinical examination, few blood tests and answers of predesigned question were recorded. The questions were related to MS like hot flushes, sweating, restlessness, dryness of skin and vagina, poor memory, depression, bone pain, urinary complaints and decreased libido. Blood for sugar, lipid profile, estradiol and BMD (in selected cases) were done for both the groups. Data was analyzed by SPSS, p-value < 0.05 was taken significant and by Chi-square or Fisher's exact test was taken where needed. The women with heart disease, hormone replacement therapy (HRT) and chemotherapy were excluded from the study.

RESULTS

Most MS were found significantly higher in SM than NM.

Hot flushes, (535 *vs* 290, $p < 0.001$), sweating (344 *vs* 122, $p < 0.001$), poor memory (99 *vs* 65, $p < 0.001$), feeling depressed (335 *vs* 126, $p < 0.001$), dry skin/mucosa (229 *vs* 91, $p < 0.001$), decreased libido (289 *vs* 117, $p < 0.001$),

Table 1: Menopausal symptoms in natural menopause (NM) and surgical menopause (SM)

	NM (n = 1,743)	*SM (n = 554)*	*p-value*
Hot flushes	535 (30.7)	290 (52.2)	<0.001
Sweating	344 (19.7)	122 (22.0)	<0.001
Feeling depressed	335 (19.2)	126 (22.7)	<0.001
Libido	289 (16.3)	117 (21.1)	<0.001
Dry skin	229 (13.1)	91 (16.4)	<0.001
Dry vagina	99 (5.7)	65 (12.3)	<0.001
Poor memory	99 (5.7)	65 (12.2)	<0.001
Osteoporosis	51 (2.9)	39 (7.0)	<0.001
Urinary complication	59 (3.4)	42 (7.6)	<0.001

Table 2: Hypertension and investigations in natural and surgical menopause (NM and SM)

	NM (n = 1,743)	*SM (n = 554)*	*p-value*
Hypertension and CVS	191 (11)	92 (16.6)	<0.001
FSB/lipid profile	90 (5.2)	32 (6.7)	0.05
Metabolic syndrome	48 (2.8)	26 (4.7)	0.07

dry vagina (99 *vs* 65, $p < 0.001$) and urinary complains (59 *vs* 42, $p < 0.001$) were found in SM *vs* NM (Table 1).

Hypertension or cardiovascular disease were more (191 *vs* 92, $p < 0.01$), blood sugar were more (90 *vs* 32, $p \leq 0.001$) and metabolic syndrome were also more (48 *vs* 26, $p < 0.07$) in SM than NM but this did not reach the level of significance (Table 2).

Osteoporosis or osteopenia was evident more in surgical (51 *vs* 39, $p < 0.001$) than NM.

DISCUSSION

Menopause is a time when women experience numerous bothersome symptoms. Even after NM women experience many symptoms like hot flushes, sweating, poor memory and decreased libido as well as decrease BMD and some metabolic changes. However, the present study found that these conditions, including MS, to be even more prevalent among women in SM than in women who had NM. Our study is similar to the comment of the Duffy OK et al who stated that higher proportion of surgically menopause women experience the extremely bothersome symptoms than naturally menopause women.[4] These findings are supported by studies in the Netherlands[5] and Sweden,[6] which found that hysterectomized women reported severe vasomotor symptoms and vaginal dryness more often than nonhysterectomized women. Schwing et al have reported high rates of hot flushes and sweating among postmenopausal women and more in SM women.[7] This is same with our study, actually the abrupt decrease in estradiol level may lead to higher prevalence of these symptoms among women with SM.

The rates of poor memory and decreased libido were significantly higher in SM than NM was found in our study, which is supported by the study of Suna Ozdemir.[8] A recent study suggested that SM may be accompanied by cognitive impairment[9] and poor memory. Unfortunately, we did not have this (variable) cognitive skill in our study group.

Oophorectomy has been shown to increase the risk of CVD; our study showed that hypertension and CVD was more in surgically menopause women. The cause of hypertension is controversial in postmenopausal women because of coincidence of menopause and aging.[10] Some studies have reported strong association between NM and increased blood pressure but others have not showed.[11] A trend toward a higher blood pressure has been reported among women in SM.[12] Our study showed that the metabolic syndrome like raised fasting blood sugar, increased LDL, decreased HDL are more in SM than NM. These findings are similar to study of Cho GJ.[13]

A study of BMD was done in selective cases for both groups, again we found that incidence of bone loss was more in SM women, this is strongly supported by the study of Ohta et al.[14] The limitation of our study was that it is a small study group. Bone mineral density could not be done in all cases and most of the women were taken from the urban areas which might be bias for urban women.

CONCLUSION

Menopausal symptoms are common in both NM and SM which is challenge for the gynecologist to manage. These MS were significantly higher in surgically menopause women so we need to be cautious about oophorectomy, and ovarian preservation should be the aim in all benign cases. Of course, we need to assess the risks and benefit, where there is risk of ovarian cancer we need to remove the ovaries during the time of TAH. Both HRT (following a risk/benefit

analysis) and treatment of osteoporosis may be recommended after surgery to decrease the climacteric symptoms and risk of osteoporosis in women with MS.

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