Compliance with hormone replacement therapy in postmenopausal women. A comparative study

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Summary

Objective: To assess compliance with hormone replacement therapy in postmenopausal women.

Method: Two groups were compared prospectively: 100 women who sought treatment for menopausal symptoms, and 82 women who had undergone a total abdominal hysterectomy with bilateral salpingo-oophorectomy and were using estrogen replacement therapy.

Results: compliance rates after 6 months were 81.0% and 84.1% in the two groups, respectively, and after 12 months, 73.0% and 80.5%.

Conclusions: The high rates are attributed to our investment in patient education of the benefits of treatment and repeated and close follow-up.

Key words: Compliance; Hormone replacement; Menopause.

Introduction

Compliance to treatment is very important in patients with chronic conditions who need to take medication for long periods. Yet such patients are often prone to lapses, especially when treatment is prophylactic. In a review of over 50 studies, Blackwell [1] found a complete failure to take prescribed medication in up to 50 percent of outpatients.

Hormone replacement therapy (HRT) was recommended for postmenopausal women to reduce the significant health risks related to estrogen deficiency. Since the current life expectancy of women in Western countries is around 80 years, many can expect to spend one-third or more of their lives in the postmenopausal state. Indeed, the number of older people is steadily increasing. In 1985 there were over 40 million women older than 45 in the United Stated; this number is expected to increase to more than 52 million by the year 2,000 [2].

HRT has been used extensively and successfully all over the world to counter the symptoms of menopause: vasomotor instability (hot flashes), irritability, depression, insomnia and vaginal dryness. It has also been shown to successfully prevent osteoporosis in elderly women [3] and to have a definite cardioprotective effect [4]. Neverthless, although the health benefit-to-risk ratio is definitely in favor of prophylactic HRT, many women are reluctant to accept this therapy. Some never even start treatment, and others use hormones only sporadically or stop therapy after a certain time.

Our center follows a policy of intense patient education and follow-up for all postmenopausal women receiving HRT.

The purpose of this prospective study was to examine the compliance rates to HRT in comparison to earlier reports.

Received October 20, 1997
revised manuscript accepted for publication November 30, 1997

Materials and Methods

Two groups of postpenopausal women were examined: *Group I.* 100 postmenopausal women aged 42-58 that sought HRT for relief of menopausal symptoms. All were given continuous estrogen-progesterone therapy with conjugated equine estrogen (Premarin, Ayerst Labs, Inc. New York), 0.65 mg daily, and medroxyprogesterone acetate (Provera, Upjohn Manuf Co. Kalamazoo, Minn), 10 mg daily for the last 13 days of each cycle.

Group II. 82 perimenopausal women aged 40-59 years who had undergone total hysterectomy and bilateral salpingo-oophorectomy at our center for benign disease (fibromyomas, endometriosis, etc.). They received continuous estrogen (Premarin) 0.625 mg daily.

All patients were interviewed at the initial visit. Follow-up was conducted every three months for one year. Noncompliance was determined by self-reports to the menopause clinic.

All women had been amenorrheic and had follicle-stimulating hormone levels in the menopausal range. None had received hormonal treatment before the start of the study.

Results

Improvement in menopausal symptoms was noted in both groups. Intermenstrual or withdrawal bleeding occurred in 13 patients in Group I (8 atrophic endometrium, 2 inactive endometrium, and 3 proliferative endometrium). All underwent a fractional diagnostic dilatation and curettage, and since no malignancy was reported, all were encouraged to continue HRT.

Hot flashes, mastodynia and depression were rare and mild, and rates were comparable in the two groups. Most complaints disappeared in time (Table 1). Table 2 lists the reasons for discontinuation of HRT. Compliance was 81.0% (81/100) in group I and 84.1% (62/82) in group II after 6 months of HRT, and 73% (73/100) and 80.5% (66/82), respectively, after 12 months.

Discussion

Our prospective study evaluated the compliance of postmenopausal women with intact uteri (Group I) and

after hysterectomy (Group II). Results were relatively good in both groups. The better compliance in Group II (surgical menopause) may be attributable to their enhanced motivation because they were not concerned about cancer of the uterus [5].

HRT is an important part of preventive health care in postmenopausal women. It is the most effective treatment for the postmenopausal syndrome, and has been shown to successfully reduce rates of osteoporosis [3] and cardiovascular disease [4]. To derive the greatest benefits, however, patients must be willing to commit themselves to long-term therapy. Compliance with HRT, as with other prophylactic medications, is reportedly low. The major reasons given by patients for discontinuation of therapy is fear of uterine or breast cancer. Others include doubts about the benefit of HRT and concern over possible side-effects. In a recent study by Ravnikar [6], of 2,500 women aged 45 to 55 years receiving HRT, 20% stopped taking the drug within nine months, 10% used it sporadically, and 20% to 30% never filled the prescription at all. Entirely different compliance rates were cited by Nachtigall [7], who noted that only five percent of 220 private menopausal patients failed to return after one year and seven percent of 1,330 women in a multicenter study reported noncompliance. The clinical importance of noncompliance is related to the degree to which it interferes with achievement of the therapeutic goal [8]. Ferguson *et al.* [9] surveyed 289 women by questionnaire. Although 89% of those on HRT knew that lack of estrogen was a significant factor in the development of osteoporosis, which was true of only 27% of the women not using HRT. We believe every woman facing menopause should receive a detailed explanation of the importance of HRT and the possibility and nature of side-effects, to ensure that she understands the logic and value of the treatment. Time should also be allotted for questions and counseling [10, 11].

Table 1. — *Menopausal symptoms during early HRT*

	Group I (natural menopause) (n=120)	Group II (surgical menopause) (n=82)
Hot flashes	3	2
Breast tenderness	6	7
Vaginal dryness	3	2
Insomnia	2	1
Depression or irritability	1	1
Fatigue	3	3
Headaches	2	1

Table 2. — *Reasons for discontinuation of HRT within one year*

	Group I (natural menopause) (n=120)	Group II (surgical menopause) (n=82)
Fear of cancer (Breast, Uterus)	3	1
Withdrawal bleeding	5	—
Friend advised to stop	2	1
G.P. expressed doubts as to benefit	1	1
Controversy over it's benefit	3	3
Medical condition (deep vein thrombosis, etc.)	1	1
Weight gain	3	2
No reason given	5	2
Lost to study	4	5
Total	27	16

Furthermore, the responsibility for compliance must be shared between the physician and the patient. The attitude of the physician towards medication in general and the specific explanations/instructions he/she gives the individual patient may well be a decisive factor in compliance. At our center in addition to the initial interview, we invite each patient for another interview and conversation every three months with time for questions and a self-report of the patient's impression of the treatment. We believe this has a significant effect as shown by our good compliance results in this study.

Since noncompliance was reported to the physician in the Menopause Outpatient Clinic, no special method (such as blood tests) was necessary to prove or disprove acceptance of medication.

In conclusion, patient education and explanations at each visit are necessary to motivate compliance and achieve maximum benefits from HRT.

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