Practice Patterns of Some Gynaecologists in Malaysia with Regards to Prophylactic Oophorectomy and Hormone Replacement Therapy

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Summary

This study aimed to look at the prevailing practice patterns of gynaecologists with regards to prophylactic oophorectomy and usage of hormone replacement therapy. Questionnaires were sent to the first 200 gynaecologists listed in the membership list of the Obstetrical and Gynaecological Society of Malaysia. The response rate was 30%. The results showed that most gynaecologists would perform prophylactic oophorectomy after the age of 49 years. The result was equivocal for the ages between 45 to 49 years. Of those who retained the ovaries at the age of 45 to the menopause, 55% did so because the ovaries were still functional.

Almost all gynaecologists would prescribe hormone replacement therapy (HRT) after oophorectomy and the most commonly prescribed form was the oral type. Thirty-five per cent of gynaecologists claimed that more than 80% of their patients were compliant to HRT. The reasons perceived for the poor compliance were mainly poor knowledge and misconception.

Key Words: Prophylactic oophorectomy, Hormone replacement therapy

Introduction

The question of whether oophorectomy should be performed in a woman during abdominal hysterectomy generates much emotion. The debate has been with us for a long time. Those who proposed such a procedure have been branded as gelders. Lawson Tait, 'the foremost advocate of spaying in women' and Spencer Wells slugged out their differences in the columns of the medical journals. Presently, bilateral oophorectomy is the most common concurrent operation performed at the time of hysterectomy. In most cases, it is a prophylactic procedure involving the removal of grossly and histologically normal ovaries.

No consensus opinion exists as to the indication and timing for oophorectomy. Ovarian function continues with significant oestrogen effect into the early fifties, with the mean age for menopause being approximately 52 years. Removal of the ovaries at the age of 45 years or younger would rob the patient of 7 to 10 years of cyclic oestrogen production. It is claimed that hormone replacement therapy (HRT) cannot completely simulate the natural production and effects of sex steroids and that oophorectomy can lead to significant psychological disturbances.

Variations in the performance of prophylactic oophorectomy by gynaecologists are extreme and there

are no generally accepted criteria for the removal or conservation of the apparently normal ovary.

A reappraisal of our attitudes in favour of routine oophorectomy during hysterectomy appears to be necessary, in particular when hysterectomy is performed for benign indications in premenopausal women, with normal looking ovaries[1]. The fact that residual ovaries continue to function in the absence of the uterus is well established[2,3,4]. On the other hand, the risk of subsequent disease in the retained ovaries especially the risk of ovarian cancer, which is the major cancer health hazard for the female pelvic reproductive organs, is too important to be disregarded[5,6,7].

In the light of these controversies, we therefore carried out a survey to look at the practice patterns of gynaecologists in Malaysia with regards to prophylactic oophorectomy and HRT.

Materials and Methods

Questionnaires were posted to selected members of the Obstetrical and Gynaecological Society of Malaysia. The members selected were the first 200 persons identified as specialists in obstetrics and gynaecology from the mailing list of the society. The mailing list was obtained with the permission of the council of the society, which also admits members who are non-specialists. The reply envelope was postage paid to encourage response. The replies were kept anonymous to ensure confidentiality. The replies received from consultants and clinical specialists were analysed. Sixty replies were received.

The demographic profile of the respondents was determined as to the type of practice and years of experience in the speciality. The age at which a prophylactic oophorectomy would be performed in the absence of gross ovarian disease and the reasons for this were ascertained. One specific objective was to determine the respondent's perception of the percentage of ovarian cancer that could be prevented by prophylactic oophorectomy. The perception of the respondents towards the complications faced by the menopausal patients not on HRT and the perceived compliance were analysed. Analysis of data was in percentages.

Results

There were 60 respondents with 69% in the private sector & 31% in the government sector. Of the 31% in the government sector, 13% were clinical specialists and 18% were consultants. The breakdown of 69% private versus 31% public was a good reflection of employment categories of the gynaecologists in Malaysia emphasising that two out of three gynaecologists are in private practice in Malaysia.

Thirty-two per cent of the participants were in the group with less than 5 years of experience, revealing that 1 in 3 were in the process of establishing their practice. Of those with less than 5 years experience, 12 out of 19 were in the government service.

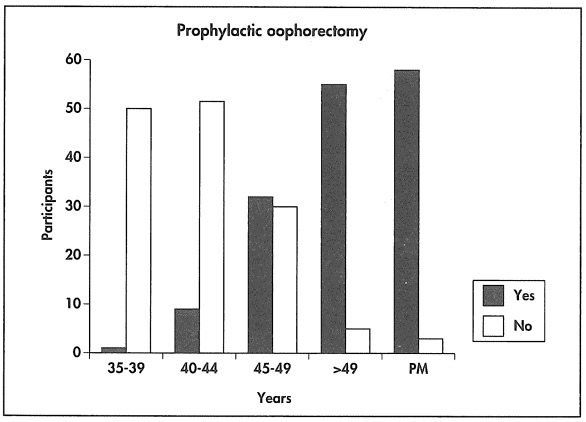

Fig. 1: The influence of patient's age on the practice of prophylactic oophorectomy

Analysing the prevailing practice of performing prophylactic oophorectomy, there was no doubt that the majority (55 of 60 or 91.6%) would perform oophorectomies in the absence of ovarian disease for patients more than 49 years of age and 57 out of 60 or 95% for those who were menopausal. Similarly the majority (52 of 60 or 86.6%) would not perform prophylactic oophorectomy for patients less than 45 years old. As for those in the age group of 45-49, the result was equivocal. Thirty-three respondents would perform an oophorectomy whereas 27 would not.

Of those who performed prophylactic oophorectomy in patients less than 45 years of age, all (i.e. 8 out of 60 or 13.3%) had less than 10 years of experience in their speciality. Of those who do not perform

prophylactic oophorectomy but retained the ovaries after the menopause, all had 10 or more years of experience in their speciality. It seemed to reveal that with more experience, the approach towards conserving the ovaries became the trend.

It was interesting to analyse the reasons given by those who retained the ovaries in the age group of more than 45 years but who were non-menopausal. Fifty-five per cent (55%) gave the reason that the ovaries were still thought to be functioning. Twenty-five per cent (25%) claimed that the patients had a conservative attitude in wishing to conserve the ovaries. Eighteen per cent cited presumed poor compliance to HRT on the part of their patients.

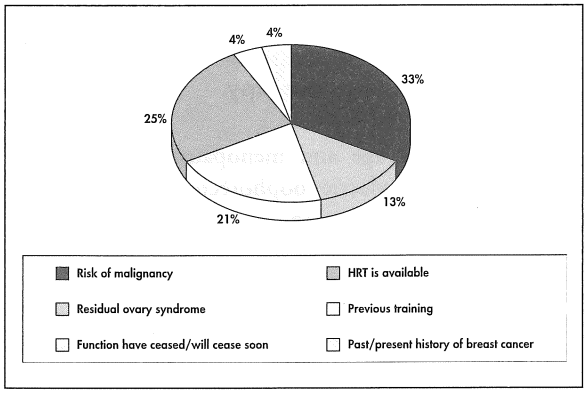

Fig. 2: Reasons given by those who removed the ovaries between 45 years and before the menopause during hysterectomy for benign disease

As for those who removed the ovaries in the same age group, 25% gave the reason that HRT was available, 33% cited the fear of ovarian cancer and 21% said that the function of the ovaries had ceased or would cease soon. Thirteen per cent did so due to the fear of the residual ovary syndrome and only 4% each did so because of their previous training or that the patient had a previous history of breast cancer (Fig. 2).

Fifty-eight of 60 or 96.7% of gynaecologists would advise HRT after oophorectomy. The oral form of HRT was the most widely used i.e. used by 51 out of 60 or 85% of gynaecologists. Only 8 of 60 used patches and 7 of 60 used the implant.

Pre operative counselling and discussion with the patients about prophylactic oophorectomy was a well established practice as fifty-four of 60 participants discussed with the patient regarding prophylactic oophorectomy preoperatively. Preferably every gynaecologist should perform such counselling in order to educate and ensure good compliance of HRT postoperatively.

Jacob & Oram[8] suggested that at least 10% of patients could have been saved from ovarian cancer by a prophylactic oophorectomy in those patients who had a previous laparotomy. In this survey 25 of 60 or 41.7% gynaecologists gave the risk of incidence of ovarian cancer as less than 1%, whilst 11 of 60 or 18.3% did not know the answer (Fig. 3). As the majority thought that prophylactic oophorectomy would prevent less than 1% of ovarian malignancy, this would explain the conservative pattern in removing the normal ovaries in this study.

The risk of ovarian cancer associated with a positive family history may be increased up to 18 fold. However, only 30% of gynaecologists in the sample surveyed would perform prophylactic oophorectomy in such patients without the patient demanding for it.

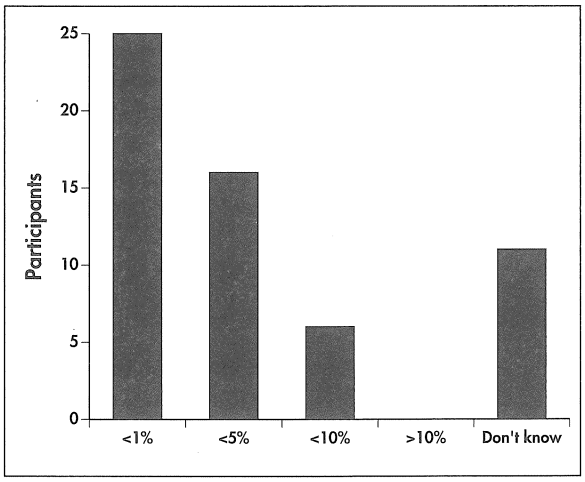

Fig. 3: Participants' perception of percentage of ovarian cancer that could be prevented by prophylactic oophorectomy during hysterectomy for benign disease

From the gynaecologists' point of view, the main reasons for poor compliance were poor knowledge and misconception on the part of the patients, discouraging the gynaecologists from prophylactic oophorectomy (Fig 4).

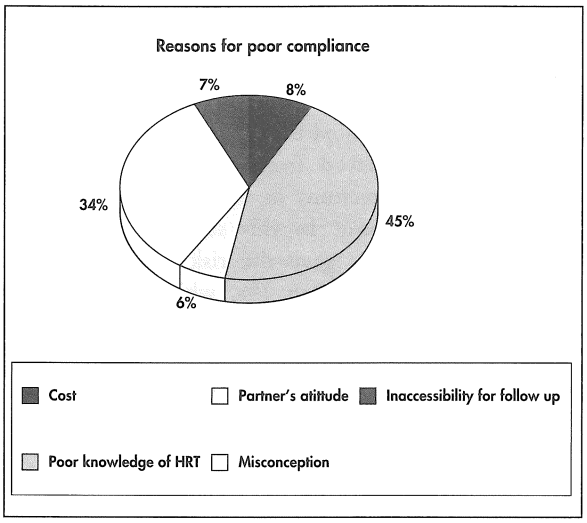

Fig. 4: The main reasons from the point of view of gynaecologists for poor compliance to hormone replacement therapy

The commonest complications thought to occur in patients without HRT were vasomotor symptoms (71%) and genito-urinary symptoms (18%). Only 2% of gynaecologists were concerned about fractures/ osteoporosis and cardiovascular complications (Fig. 5).

Thirty-five per cent (35%) i.e. 21 of 60 gynaecologists claimed that more than 80% of their patients were compliant to HRT.

Discussion

Although the replies were anonymous and postage paid, there were only 60 replies giving a response rate of 30%. Thus the findings of this survey cannot be taken to be representative of the practice patterns of Malaysian gynaecologists generally. This is acknowledged to be a limitation of this study. However there was a mix of both private sector and government specialists reflective of the current situation in Malaysia.

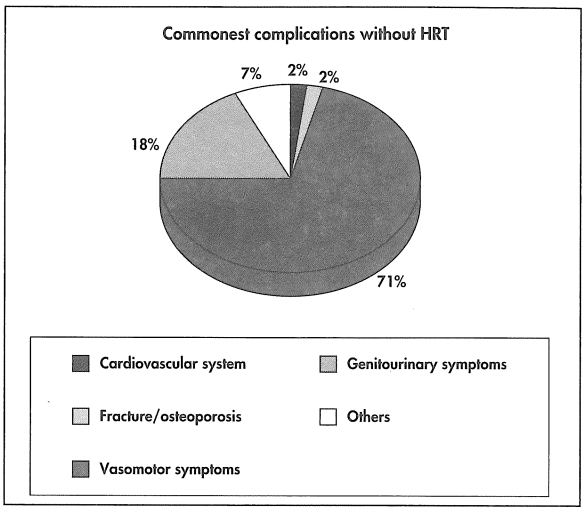

Fig. 5. The commonest complications thought to occur in patients without hormone replacement therapy.

The influence of age and menopausal status on the practice of prophylactic oophorectomy was studied. The replies showed that the majority agreed to allow pre-menopausal women at the age of 35 to 39 years to conserve their ovaries. However, the majority would do a prophylactic oophorectomy after the age of 49 years even though the women were not menopausal. Clearly the division between premenopausal and postmenopausal status was regarded as not important after the age of 49 years. This was expected as the majority of Malaysian women would be menopausal by the age of 51.7 years. The number of gynaecologists who would perform prophylactic oophorectomy after the menopause did not differ much from those who would perform the same operation after 49 years of age.The controversial age group was premenopausal women between the age of 45 to 49 years. In this survey, we found that opinions were divided with 33 gynaecologists performing prophylactic oophorectomy and 27 not doing it i.e. almost a 55:45 ratio.

Hysterectomy is one of the few procedures in medicine with which concomitant surgical procedures are frequently performed. In many cases the procedures are performed because of concomitant disease processes. However, it is more often performed for prophylactic reasons. In an extensive review, nearly 80% of women undergoing abdominal hysterectomy and 62% of women undergoing

vaginal hysterectomy had concurrent surgical procedures[9]. The incidence of oophorectomy at the time of hysterectomy rose from 25% to 41% over 20 years[10]. A study done in Great Britain submitted questionnaires to members and fellows of the Royal College of Obstetricians and Gynaecologists, asking about their practice of routine oophorectomy at the time of hysterectomy[8]. The study had a 48% response rate with 1142 replies analysed. The percentage of respondents who removed normal ovaries during abdominal hysterectomy in premenopausal women in age groups 35-39, 40-44, 45-49 and over 49 years was 0.4%, 2%, 20% and 51% respectively. In postmenopausal women this was 85%. The corresponding figures in this small study were 1.7%, 11.6%, 55%, 90% and 95% respectively. There has obviously been a changing trend towards oophorectomy over the years.

Removing apparently normal ovaries at the time of hysterectomy may have a number of advantages. It may eliminate the possibility of subsequent malignant change in the ovary. The actual incidence of cancer in retained ovaries is difficult to estimate. The risk of a woman developing ovarian cancer is 1.4%, and previous studies have reported an incidence of up to 1.2% in retained ovaries[11]. One epidemiologic study reported that the relative risk of ovarian cancer decreased for the first five years after hysterectomy but then increased by 40 - 60% after the sixth year[12]. Conversely, in women developing ovarian cancer, 4.5 - 14.1% would have undergone a previous hysterectomy with preservation of one or both ovaries[6,13].

Sometimes climacteric symptoms are not considered because the women still have ovaries although they may fail prematurely after hysterectomy. Siddle *et al.* demonstrated that the age of ovarian failure was 4 years earlier in women after hysterectomy compared with the age of the natural menopause and that 34% of women developed ovarian failure and climateric symptoms within 2 years of surgery[14]. Prophylactic oophorectomy prevents the complacent attitude that conserved ovaries remain functional and allows, indeed demands, prompt and effective hormone replacement therapy at the time when it is clearly required.

The potential for prevention of ovarian cancer by prophylactic oophorectomy may be considerable if a more scientific and logical approach can be established. Disadvantages of routine prophylactic oophorectomy include changes in self image and surgical castration, resulting in the need for hormone replacement. With the growing public awareness of ovarian cancer and with the thorough counselling for women who are candidates for prophylactic oophorectomy, it is likely that adverse changes in self image can be minimized. It is also important to ensure that the women going for prophylactic oophorectomy understand the need for compliance to estrogen therapy. The problem of osteoporosis and cardiovascular risks are serious problems if the patients are not compliant to estrogen replacement. Hormone replacement therapy, including any possible side effects and contraindications, should be discussed in women who have ovaries removed before the menopause. The most common reasons for women not taking hormone replacement therapy was their ignorance or misconception about HRT. Six per cent of the respondents blamed the partner's attitude for the presumed poor compliance. The education of the women with regards to hormone replacement should not exclude their partners. In this survey we found that the majority of gynaecologists were responsible in education and counselling. They discussed the option of hormone replacement therapy even before the operation itself.

All women aged 45 or older about to undergo hysterectomy should be counselled on the advantages and disadvantages of concurrent prophylactic bilateral salpingo-oophorectomy so that truly informed consent may be obtained. Further, we believe that all physicians caring for menopausal women should counsel their patients on the long term protective effects of estrogen replacement therapy as after prophylactic oophorectomy, hormone replacement therapy must be administered. The rate of compliance to hormone replacement therapy was thought to be as high as more than 80% if counselling is given. The reasons given for poor compliance as mainly due to poor knowledge and misconception on the part of the patients is a correctable cause. It would appear that prophylactic oophorectomy is a highly individualised decision made and taken only after the gynaecologist has fully assessed and counselled the patient such that the decision made was an agreed

informed choice by the patient. The patient's choice remains the final arbiter. It appears that gynaecologists remain divided in the performance of oophorectomy between the ages of 45 and the menopause in this sample of Malaysian gynaecologists.

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