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Attitude of Nigerian Gynaecologists to Bilateral Oophorectomy During Hysterectomy for Benign Diseases

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Abstract:
Context: Prophylactic bilateral oophorectomy during hysterectomy for benign diseases could be an important preventive measure against ovarian malignancy; but its practice is controversial.
Objective: To assess the attitude of Nigerian gynaecologists to prophylactic bilateral oophorectomy during hysterectomy for benign diseases.
Study Design: A self-administered questionnaire survey of one hundred and forty-four (144) obstetricians and gynaecologists attending the 35th Annual General Meeting and Scientific Conference of the Society of Gynaecology and Obstetrics of Nigeria, which held in Enugu, South Eastern Nigeria, in November 2001.
Results: Out of 150 questionnaires distributed among the conference participants; the response rate was 96%. None of the respondents (0%) would perform bilateral oophorectomy in pre-menopausal women under 40 years of age and only 11.1% would do so in pre-menopausal women between 40 and 44 years. However, 80.6% of the respondents would carry out the procedure in pre-menopausal women 50 years and above and 83.3% would do so in postmenopausal women, irrespective of age. Furthermore, 88.9% and 86.1% of the respondents would discuss pros and cons with and obtain written consent from the clients respectively before bilateral oophorectomy; and 52.8% would obtain the consent of the husband where applicable.
Conclusion: Over 80% of Nigerian gynaecologists would carry out bilateral oophorectomy during hysterectomy for benign diseases in pre-menopausal women aged 50 years and over and in postmenopausal women irrespective of age. Eighty-six point one percent would obtain written consent from the clients while 52.8% would obtain spousal consent before the procedure.

Key Words: Prophylactic oophorectomy; Hysterectomy, Perimenopause [Trop J Obstet Gynaecol, 2006, 23:123-125]

Introduction:

The fate of the normal ovaries during hysterectomy for benign diseases in pre-menopausal women has remained controversial for over one hundred years[1].

The controversy revolves around the balance between the physiological functions of the ovaries on one hand and the risk of ovarian diseases, especially ovarian carcinoma, on the other.

Bilateral oophorectomy is indicated during hysterectomy for malignant diseases and most gynaecologists would carry out the procedure during hysterectomy for benign diseases in postmenopausal women. In the latter case, it is generally believed that the risk of ovarian carcinoma outweighs the markedly attenuated physiological functions of the postmenopausal ovaries. However, when hysterectomy is carried out for benign diseases in pre-menopausal women, there is no consensus on the fate of the normal ovaries.

Proponents of ovarian conservation argue that it is bad practice to remove normal tissues. Moreover, after hysterectomy, the residual pre-menopausal ovaries can still play reproductive roles in the form of ovum donation for assisted conception and they certainly play relevant endocrine roles until menopause and beyond[2]. Furthermore, the risk of cardiovascular diseases and osteoporosis resulting from oestrogen deprivation and the generally poor compliance with long-term oestrogen replacement are strong arguments against pre-menopausal bilateral oophorectomy. Life expectancy may be reduced by up to 1.4 years following bilateral oophorectomy in pre-menopausal women, if oestrogen replacement is inadequate[3].

On the other hand, opponents of ovarian conservation argue that the risks of benign and malignant diseases in conserved ovaries necessitate their removal. These diseases range from the residual ovary syndrome (which is present in 3-10% of women with hysterectomy and ovarian conservation[4]) to ovarian carcinoma. The high mortality rate associated with the latter, the slim prospects of prevention due to the absence of a pre-invasive stage and the low chances of early detection consequent on the absence of a satisfactory screening protocol are strong arguments against ovarian conservation.

The necessity for informed consent before bilateral oophorectomy is hardly in dispute, but the question of

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spousal consent would appear to be more contentious. While the diversity of opinions on this topic is a reality, we are not aware of any recent study addressing the attitude of Nigerian gynaecologists to this important issue. This study is intended to fill this gap and put on record the attitudinal disposition of Nigerian gynaecologists on this subject.

Materials and Methods:

Pre-tested, semi-structured questionnaires were self-administered to gynaecologists attending the 35th Annual General Meeting and Scientific Conference of the Society of Gynaecology and Obstetrics of Nigeria (SOGON), which held in Enugu, South Eastern Nigeria in November 2001. The questionnaires sought for information concerning the respondent's professional status, age, country of specialist training, place and duration of practice.

Questions were then asked as to whether the respondents would carry out bilateral oophorectomy during hysterectomy for benign diseases in pre menopausal women aged under 40 years, 40 44 years, 45 49 years, 50 years and above and in postmenopausal women irrespective of age. Lastly, enquiries were made into the respondents' attitude towards informed consent and spousal consent before bilateral oophorectomy.

Results:

One hundred and fifty questionnaires were distributed to the conference participants out of which 148 were returned and 144 correctly completed, a response rate of 96%. At the time of this study, the SOGON membership register had 494 full members out of which 29 sojourned outside Nigeria. The sampled population (144) therefore represents only 31% of the Nigerian-based gynaecologists.

The characteristics of the respondents are shown in Table 1. Most of them were Nigerian trained consultant gynaecologists, under 50 years of age and in active practice in tertiary health institutions in Nigeria.

Table 2 shows the attitude of the respondents to bilateral oophorectomy during hysterectomy for benign diseases in different categories of women. None of the respondents would perform bilateral oophorectomy in pre-menopausal women under 40 years of age and only 11.1% would do so in pre-menopausal women between 40 and 44 years. On the other hand, 80.6% of the respondents would carry out the procedure in pre-menopausal women 50 years and above and 83.3% would do so in postmenopausal women, irrespective of age. As for the 45-49 years age category, 52.8% of the respondents would carry out bilateral oophorectomy during hysterectomy while 47.2% would not.

Table 3 shows the attitude of the respondents to informed consent before bilateral oophorectomy. Eighty-eight point nine per cent and 86.1% of the respondents would discuss pros and cons and obtain written consent respectively before bilateral oophorectomy. As for husbands' consent where applicable, 52.8% of the respondents would obtain husbands' consent while 47.2% would not.

Table 1

Characteristics of the Respondents.

Characteristics	Number	Percentage
A. Status:		
Consultants	116	80.6%
Senior Registrars	28	19.4%
B. Age:		
30-39 years	56	38.9%
40-49 years	60	41.7%
50-59 years	20	13.9%
60 years and above	8	5.5%
C. Place of Specialist Training:		
Nigeria	120	83.3%
Great Britain	14	9.7%
Eastern Europe	10	6.9%
D. Place of Practice:		
Teaching Hospital	68	47.2%
*Private Hospitals	44	30.6%
Federal Medical Centres	32	22.2%
General Hospitals	20	13.9%
Specialist Hospitals	8	5.6%
E. Duration of Specialist Practice:		
< 5 years	65	45.1%
5-9 years	12	8.3%
10-14 years	8	5.6%
15-19 years	8	5.6%
20 years and above	16	11.1%

* Twenty-eight respondents were practicing in both public and private health institutions.

Table 2
Attitude of 144 Nigerian Gynaecologists to bilateral oophorectomy in different categories of women.

Category of Women	Would perform bilateral oophorectomy	
	Yes	No
Pre-menopausal women:		
< 40 years	0 (0%)	144 (100%)
40-44 years	16(11.1%)	128(88.9%)
45-49 years	76(52,8%)	68(47.2%)
50 years and above	116(80.6%)	28 (19.4%)
Premenopausal women:	120(83.3%)	24(16.7%)

Table 3
Attitude of 144 Nigerian Gynaecologists to informed consent before bilateral oophorectomy.

Type of Consent	Attitude	
	Yes	No
Would discuss pros and cons	128 (88.9%)	16(11.1%)
Would obtain written consent	124(86.1%)	20(13.9%)
Would obtain husband's consent (where applicable)	76(52.8%)	68 (47.2%)

Discussion:

The first question that might arise from this study is whether the views of 31% of Nigerian gynaecologists are representative enough. Since the sampled population includes active practitioners of various cadres, age groups and experiences, we believe it is representative enough to allow reasonable conclusions.

No one in the sampled population would remove both ovaries during hysterectomy for benign disease in pre-menopausal women under 40 years and only 11.1% would do so in women between 40 and 44 years. This is not surprising since it is well known that the consequences of bilateral oophorectomy could be far-reaching in these categories of women. The florid symptoms of surgically induced menopause could be difficult to manage in the absence of adequate compliance with long-term oestrogen replacement.

It is interesting to find that 80.6% of Nigerian gynaecologists would remove both ovaries during hysterectomy for benign disease in pre-menopausal women aged 50 years and over. This is very close to the finding in a similar survey of members of the Royal College of Obstetrics and Gynaecology[6] where most respondents would remove both ovaries during hysterectomy when the woman was closer to 50 years.

The average age at menopause in United Kingdom[7] and other developed countries[8] is 51 years. Although we are not aware of any study addressing menopause among Nigerian women, the average age at menopause in Nigeria has been estimated to be 50+5 years[9]. It would appear that the willingness of most Nigerian gynaecologists to remove both ovaries in pre-menopausal women 50 years and over is guided by the belief that, at that age, menopause is imminent.

Although after menopause, the ovaries continue to produce decreasing amounts of female sex hormones for a variable length of time, they are no longer of any reproductive relevance. Moreover, they are more than ever at risk of epithelial ovarian tumours, the risk of which increases with age and peaks at 50-70 years[8]. Of all gynaecological malignancies, malignant ovarian tumours carry the worst prognosis. As the risk of ovarian malignancy could be eliminated by bilateral oophorectomy, it is expected that majority of gynaecologists would carry out this procedure during hysterectomy for benign disease in postmenopausal women. This study confirms that expectation, as 83.3% of the respondents would remove both postmenopausal ovaries. The small percentage (16.7%) that would conserve both ovaries in postmenopausal women must be very strong opponents of prophylactic oophorectomy.

The need for informed consent before bilateral oophorectomy cannot be over-emphasised[10]. This need appears to be recognized by the surveyed population as 88.9% and 86.1% of them would discuss pros and cons with the client and obtain her written consent respectively before carrying out the procedure.

In conclusion, 80.6% of Nigerian gynaecologists would remove both ovaries during hystetrectomy for benign diseases in pre-menopausal women aged 50 years and over and 83.3% would do so in postmenopausal women. While 86.1% would obtain written informed consent, only 52% would obtain spousal consent from the clients prior to bilateral oophorectomy.

References:

1. Studd J. Prophylactic oophorectomy. *Br J Obstet Gynaecol.* 1989, 96: 506-509.
2. Gronroos M, Klemi P, Saimi T. Ovarian production of oestrogens in the postmenopausal ovary. *Int. J. Gynaecol.* Obstet. 1980, 18: 93-98.
3. Speroff T., Dawson M. W., and Speroff L. A risk benefit analysis of elective bilateral oophorectomy: effect of changes in compliance with oestrogen therapy on outcome. *Am. J. Obstet. Gynaecol.* 1991, 164:165-174.
4. Saddal-Allum J., Rae T., and Roggers V. Chronic pelvic pain caused by residual ovaries and ovarian remnants. *Br J Obstet Gynaecol,* 1994, 101: 979-985.
5. Society of Gynaecology and Obstetrics of Nigeria (SOGON). Membership Directory 2002.
6. Jacobs I., Oram D. Prevention of ovarian cancer: a survey of the practice of prophylactic oophorectomy by fellows and members of the Royal College of Obstetrics and Gynaecology. *Br J Obstet Gynaecol,* 1989, 96: 510-515.
7. Holland E.F.N., Studd J.W.W. Postmenopausal osteoporosis. *Progress in Obstetrics. & Gynaecology,* 1994, 11: 371-386.
8. Stuart C., Ash M. (Eds). Gynaecology by Ten Teachers. 17th Edition. Arnold. Pp 225-235.
9. Azzan B.B. Physiology of the female Reproductive organs. In Agboola A. (Ed). *Textbook of Obstetrics & Gynaecology for Medical Students.* (1998). 1: 23-34.
10. Woodman N., Read M.D. Oophrectomy at Hysterectomy. *Progress in Obstetrics. & Gynaecology,* 2000, 14: 245-254.