



Prevention of Genital Tract Malignancies: A Task for all

Kalio DGB¹; Eli S²; Briggs NCT³; Iwo-Amah R¹; Okagua KE¹

Department of Obstetrics and Gynaecology, Rivers State University Teaching Hospital.¹
Mother and Baby Care Global Foundation.²
Rivers State Hospital Management Board.³

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*Corresponding Author

Dr. Eli S, MB BS, FWACS, FIMC, CMC

E-mail: elisukarime@gmail.com

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LETTER TO THE EDITOR

As more is learned about the factors associated with malignant diseases of the female genital tract comprising of cancers of the vulva, vagina, cervix, endometrium, fallopian tubes and ovaries, there is hope of preventing certain types.¹ This involves elimination or control of what are believed to be causal agents, a typical examples being the human papilloma virus (HPV) which is the prime aetiological factor of cervical cancer.² Screening modalities in the developed world constituted a great step in the prevention of cervical cancer by over 80%.³ The advent of cervical cancer vaccination revolutionized the prevention of cancer of the cervix.⁴ However, there is scarcity of cervical cancer vaccines in the developing countries of the world.⁵ Where these vaccines are available the cost is a challenge because majority of the masses cannot afford them.⁶

Vulvectomy for dysplasia of the vulva epithelium has its place but does not always prevent squamous cell carcinoma in that site.⁷ Hysterectomy for all women showing cervical epithelial dysplasia or suffering from post menopausal bleeding or discharge or whose family is completed could well reduce the number of cancer if it is cervical cancer or cancer of the corpus uteri.⁸ Such an approach, however, is likely to involve operative mortalities.⁹

Reason and safety impose strict limit on the place of prophylactic surgery in the prevention of

cancer of the vulva, cervix, corpus uteri, fallopian tubes and ovaries.¹⁰

Early Diagnosis

It is generally accepted that an early cancer is more amenable to cure than one which has been present for sometimes.¹¹ It is important to pay heed to the first suspicious symptoms or signs presented by the patient, for example, irregular uterine bleeding or discharge occurring after the age of forty years.¹² Although early diagnosis and treatment must offer the patient a better chance of survival, they do not always make much difference that might be expected.^{1,12} Stage 1 cases of cancer of the cervix can do badly while more advanced ones sometimes respond well to treatment.¹³ This is because certain cancer cell growth divide the vascular channel at a very early stage, whereas others can come to terms with their cancer cells,¹⁴ even to the extent of inactivating the malignant cells liberated into the blood or lodged in the bone marrow.¹⁵ The first type is rarely cured no matter how early the occurrence, whereas the second is nearly always cured no matter how long treatment is deferred.¹⁴

The result of therapy according to the stage of cancer of the cervix clearly shows that the less the clinical extent of the disease the better the outlook.¹²⁻¹⁴ However, it is often assumed that the extent of a cancer represents its age.¹³ That this is not the case as shown by some literatures that women who have

symptom for more than 6 months before being treated often show better 5year survival rate than those with symptoms for only 3 - 6months.^{12,13}

This is because those women who delay taking advice either die before treatment is instituted or they have cancers which are only slowly progressive.⁵⁻⁷ This also explains why the clinical stage of cancer of the cervix is not necessarily proportional to the duration of symptoms.¹⁴⁻¹⁵

Nevertheless, the earlier the patient reports, the better the overall 5year survival rate.^{2,3} Even this argument, however, may be deceptive. Hypothetically a woman with a stage 1 carcinoma of the cervix is treated in 1989 and dies in 1999, her survival for more than 5years is then credited to early treatment. If the same woman neglects her symptoms and fails to take advice until 1994, the cancer has then progressed to stage iv. She is then treated but only survives until 1995, and thus attributed to her late stage disease.⁵⁻⁷

The above scenario is hypothetical. Evidence have shown that microscopically diagnosed cancer of the cervix at well women clinic who receive prompt treatment have better prognosis.^{8,9}

PROPAGANDA AND EDUCATION OF THE PUBLIC

Women are often slow to report symptoms of genital tract malignancies in developed countries of the world.¹⁻⁴ The reasons for late presentations of genital tract malignancies are social, cultural, religious and economically.^{7,8} For this reason, those who believe that early treatment will have a dramatic effect in the results often advocate for propaganda to ensure that all women are aware of the early symptoms of genital tract malignancies.^{5,6} Unfortunately some women are resistant to education by the mass media and are more likely to accept what they are told by friends than by the doctors. Often it is the over anxious woman who takes notice of misinformation and wrong advice, which have no basis except fear. The women with genuine symptoms often avoid presenting early. They would rather remain in doubt because whatever they may have heard, the refuse to accept that genital tract cancer can be cured.⁹

Despite the acknowledged risks of smoking and genital tract malignancies,⁴ young women are amongst the heaviest smokers in the developed countries.^{7,8} Genital tract malignancies have increased in women in the past decades.¹⁰ To date, health education does not appear to have been heeded, although there have been sure reduction in those who smoke during pregnancy.⁹ However, in the developed countries patients with genital tract malignancies present early compared with developing countries of the world.⁴

In developing countries it is commonly observed especially in the lower socio-economic patients, that post-menopausal women are reluctant to report symptoms of abnormal vaginal bleeding and offensive vaginal discharge to their families because of embarrassment, although they recognize that these symptoms are abnormal.^{9,10}

ROUTINE MEDICAL EXAMINATION

One possible method of improving the outcome of genital tract malignancy is to discover malignant disease before it has become invasive or while it is still microscopic and asymptomatic.^{3,4} This means the routine screening of all apparently normal women who are at risk of genital tract malignancy is recommended.⁵ Arrangements for this, however, usually concentrate on the detection of cervical cancer to the exclusion of other genital tract malignancies which may be equally, if not more, injurious to the health of women.^{6,7}

In the developed world, cancer of the breast kills more women compared to cancer of the cervix.¹² It can be argued that regular examination of breast is as routine as test on the cervix.¹² Malignant conditions of the ovary, although less common are mostly fatal unless detected in their early asymptomatic stage.¹⁴ Again, diseases such as chronic hypertension, diabetes mellitus, obesity and peptic ulcer disease may potentially be far more dangerous to women than is cervical intraepithelial neoplasia.¹³

Note the observation that cancer detection clinic or clinics devoted only to clinical or routine cervical cancer diagnosis are of limited value.¹² If the best results are to be obtained cervical smears need to be taken as seriously as a full pelvis and general examination carried out by someone who is competent to recognize pelvic and other disease by their clinical expertise and to give expert medical advice.¹¹⁻¹²

From the standpoint of detecting genital cancer in its early and pre-invasive stage, cytology and colposcopy have proven their worth.^{1,2} CA 125 has been developed as a reasonably satisfactory tumor marker for ovarian cancer which helps in the screening, treatment and prognostic factor of cancer of the ovary.¹⁴ However, it is neither cost-effective method for widespread screening nor is it sufficiently specific.^{1,14} Similarly, trans-vaginal ultrasound may be useful as a screening tool for ovarian malignancy but not suitable for large scale screening.¹⁴

CYTODIAGNOSIS

Cytodiagnosis depends on the fact that epithelial cells are being shed continually from the epithelial lining of the genital tract.¹⁵ They can therefore be collected and examined to see if they show cytological evidence of dysplasia.¹⁵ It should be however noted that cytology is not in itself a method for cancer diagnosis in general.^{14,15} It is a means of screening apparently healthy and symptom-free women to discover those who deserve further investigation to see if they have malignant disease.^{15,16} Cancer can only be diagnosed with reasonable certainty by histological examination of malignant tissues.¹⁴⁻¹⁶

TECHNIQUES

Vaginal Cystoscopy

The secretory lining of the upper vagina normally contains desquamated cells from the vaginal

wall.^{2,3} The vaginal aspect of the cervix, the endocervix, the endometrium and sometimes the fallopian tubes are made up of similar epithelial tissues.²⁻⁴ The examination of desquamated cells in the vaginal pool, test suggested by George Papanicolaou may be the earliest means of detecting premalignant lesions of the genital tract in these cities especially in the cervix and the endometrium.^{2,13}

This method of collecting material has the advantage that it can be done blindly by anyone even the woman herself. Since the smear contains endometrial as well as cervix cells, its examination may give lead to cancer in either site.¹³⁻¹⁵ On the other hand, the admixture of cells means that the Cytologist may find it more difficult and time consuming to interpret.^{14,15} Since it is the detection of cervical pre-invasive cells, the cervical scrape method for obtaining materials is preferable.^{2,13}

CERVICAL SCRAPE

This method is the gold standard of cytodiagnosis of premalignant lesions of the cervix.^{12,13} It involves scraping of the superficial cells from the external and endocervix by means of a special wooden spatula.¹⁶ Accurate application of the spatula to the squamo-columnar epithelial junction throughout circumferentially is essential.¹⁴⁻¹⁶

The Ayre's scrape technique is unreliable in picking up endometrial cells but it is more efficient than the Papanicolaou method in collecting cervical cells.¹⁷ Moreover, the resulting smear can be assessed more easily and more quickly in the laboratory.¹⁵⁻¹⁷

The Ayre's spatula occasionally yields insufficient number of endocervical cells.¹⁴⁻¹⁶ The extended tip spatula with a longer endocervical limb has been found to have a higher rate of satisfactory smears.^{16,17} The Ayre's spatula can sometimes be replaced by the cyto-brush to improve the yield of endocervical cells.¹⁸

This is the technique to be employed for the routine screening of apparently well women.^{14,15} It can be applied during pregnancy and is not ruled out if the woman is menstruating or bleeding.^{15,16}

Indeed it is potentially dangerous to insert instruments into the cavity of the endometrium if there is a possibility of cancer of the endometrium with pyometra.¹⁸ Suction curettage is effective method of obtaining endometrial tissue using a negative pressure.¹⁸ Suction aspiration of the endometrium carries an accuracy rate over 80% in the diagnosis of endometrial cancer.¹⁶⁻¹⁸

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