شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

شبكة المعلومـــات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

﴿ قـسـم ﴾

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد اعدت دون آية تغيرات

يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

في درجة حرارة من 15 – 20 مئوية ورطوبة نسبية من 20-40 %

To be kept away from dust in dry cool place of
15 – 25c and relative humidity 20-40 %

بعض الوثائق الأصلية تالفة

بالرسالة صفحات

لم ترد بالأصـــل

COMPARISON BETWEEN DIFFERENT DIAGNOSTIC MODALITIES FOR ASSESSMET OF PELVIC MASSES

THESIS FOR MD DEGREE
IN OBSTETRICS & GYNAECOLOGY
EL-MINYA UNIVERSITY

BY

AHMED SHERIF TALAAT ABDEL-RAHMAN
ASSISTANT LECTURER
EL-MINYA UNIVERSITY HOSPITAL

UNDER THE SUPERVISION OF

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BACKGROUND

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Primary ovarian cancer is the most common, insidious, intractable and lethal type of gynaecological malignancy. Every year about 5200 women in the UK will develop the disease and less than 40% will survive for 5 years. The early stages do not usually produce easily recognisable symptoms. Consequently, over 70% of cases are diagnosed when the transformed ovarian cells have spread to other sites. Unfortunately there has not been any marked improvement in treatment regimens for women with advanced disease during the last 20 years.

There is good evidence, however, to suggest that the 5-year survival rate after surgery alone would be greater than 90% if the cancer could be detected which it is still confined within the ovaries (Young et al., 1991). The correlation between 5-year survival rates of ovarian cancer and stage at diagnosis has long suggested that early detection by screening may improve the prognosis for the diagnosis. This hypothesis has not yet been tested in a randomised controlled study and all evidence concerning the efficacy of potential screening tests is indirect (Jacobs, 1995).

▫ THE OPTIMAL SCREENING TEST:

Screening has been defined as the identification among apparently healthy individuals of those sufficiently at risk of a specific disorder to justify a subsequent diagnostic test or procedure, or in certain circumstances direct

preventive action (Kramer et al., 1993). The World Health Organisation (WHO) has recommended criteria that should be satisfied before a screening programme is implemented for a particular disease (Breslow et al., 1987). These include knowledge of the natural history of the condition and the effectiveness of the screening procedure. Mass screening is only meaningful if the specific disease has certain characteristics. The disease should be an important health problem that leads to high morbidity and mortality if treated after spontaneous discovery. Ideally, there should be a long recognisable early stage; diseases with a short pre-clinical stage are not suitable for mass screening, because then there must be frequent check-ups to those afflicted in time. The course of the illness in high-risk patients should be known: if the course is faster, these patients should be examined more often. Further, it is of value to know if early stages always end in manifest disease or if spontaneous remissions occur. Preferably, the disease should have a high incidence, otherwise the ratio between those who have a positive test and actually have the disease (true positives) and those who have a positive test and are healthy (false positives) will be too high. If the incidence of the disease in the general population is not sufficient for mass screening, high-risk groups can be screened. The yield of the screening procedure varies with patient demographic: in groups where economic and medical resources are scarce the yield of true true-positives is likely to be higher, as unrecognised disease is more frequent. Breast cancer and cervical cancer do not fulfil all these criteria, nevertheless screening has been efficient (Pharoah et al., 1998).

All diagnostic methods are not suitable for screening purposes. The validity of the test should be high: the distinction between a positive and a negative test result must be clear. Thus, the optimum test should have a high sensitivity and a high specificity. If sensitivity is low, cases must be overlooked, and part of the yield may be lost. If specificity is low, we risk submitting healthy patients to unnecessary medical investigations. A lower specificity can be accepted if a positive test does not lead to extensive medical consequences. Furthermore, the reliability of the test has to be high: its susceptibility to variation of the method and to that of the observer must be as low as possible.

Further, the ideal screening method should be devoid of side effects and cause little discomfort. It should be simple, so that extensive training is not needed for those performing the test. Finally, the procedure should be inexpensive. It is obvious that the demands on the test used are high, and no test can fulfil all of these criteria (Young et al., 1991).

▫ EVALUATION OF ANY SCREENING TEST:

Early detection is only efficient if it decreases the mortality of the disease. If survival is used as an end-point in the evaluation of the effectiveness of screening, tumour will be detected earlier and survival thus appears longer (lead time bias). In addition, slow-growing, less aggressive tumours will be found (length bias). These two forms of bias will distort the results. By using mortality as an end-point, this distortion is avoided.

IS OVARIAN CANCER SUITABLE FOR SCREENING?

When considering screening for ovarian cancer, we face several problems concerning both the nature of the disease and the methods used for screening. The ovary has the potential of developing many different cysts, and ovarian cancer is a very heterogenic disease. The early natural course of ovarian cancer is unknown, but probably variable. This has implications for screening: as we do not know how fast these tumours develop, the optimum screening interval can not be determined.

Further, it is unclear if all early stages of ovarian cancer require treatment, or if some go into spontaneous remission and can be left to follow up. Ultrasound studies have shown that 2-3% of all asymptomatic postmenopausal women has small ovarian lesions (Campbell et al., 1989). The relation of these lesions to ovarian cancer is unknown. Submitting all women with small ovarian lesions to surgery will increase the occurrence of surgical complications and diminish the gain of screening. As we do not know if these cysts malignify, we have to watch them if they are not removed, even though the optimum interval between check-ups is uncertain because the behaviour of early ovarian cancer is unknown.

Another problem is the incidence of ovarian cancer. In the industrialised countries, the incidence in all ages is roughly 20 per 100,000 women. A low incidence makes the ratio between found cancers and false positive cases unfavourable and the benefit of screening is decreased. The incidence of breast cancer is 4-5 times greater than the incidence of ovarian cancer. In

spite of the higher incidence, extensive studies have been necessary to prove the efficacy of screening for breast cancer.

Very little is known about the early genetic, molecular and cellular changes associated with ovarian carcinogenesis. The existence of a familial predisposition to ovarian cancer was initially recognised as a result of epidemiological analysis. Case control studies during the last 30 years have consistently documented an increased relative risk of 2- to 20-fold for ovarian cancer associated with a family history of the disease (Bourne et al., 1993). Further analysis has demonstrated that the degree of risk is related to the strength of the family history and in particular to the number of affected first-degree relatives (Hall et al., 1990). The lifetime risk of death from ovarian cancer for a woman with a single affected relative is approximately 2.5%, while the risk to a woman with two or more affected relatives may be as high as 40%. The risk of ovarian cancer in the latter group is consistent with inheritance of a single autosomal dominant gene of high penetrance. Pedigree studies of families with a high incidence of cancer have revealed three main syndromes associated with ovarian cancer (Lynch et al., 1991). The most common hereditary form of ovarian cancers occurs in association with breast cancer. A large number of hereditary form of ovarian/breast cancer families have now been described in which there is a high frequency of both cancers and an association with an early age of onset. Less frequently ovarian cancer occurs a part of the hereditary non-polyposis colorectal cancer (Lynch II) syndrome. Hereditary site-specific ovarian cancer without an excess of breast or colorectal cancer is the least common familial syndrome. Although women in these families have a particularly