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UTERINE CANCER

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Abstract : Endometrial carcinoma is the most common gynecologic malignancy . A through understanding of the eidemology, pathophysiology and management strategies for this cancer allows the obstetrician -gynecologist to identify women at increased risk, constribute toward risk reduction and facilliate early diagnosis. The society of gynecologic on cologys clinical practice recommendation for diagnosis and treatment. The objective of this article is to comprehensively review the scientific literature and summarize the available data regarding the outcome disparities of African American women with uterine cancer.

Literature on disparities in uterine cancer was systematically reviewd using the pub Med search engine. Article from 1992 to2012 written in English were reviwed. Search terms included endometrial cancer uterine cancer racial disparities and African American.__*this article examines .risk factor, including genetic predisposition , diagnosis and metastatic evaluation ,surgical management of early and advanced cancer, including lymphodenectomy in early cancer.*

KEY WORDS: Endometrial cancer ,Review, Surgery , Diagnosis,Risk factor Evaluation.

1.INTRODUCTION:

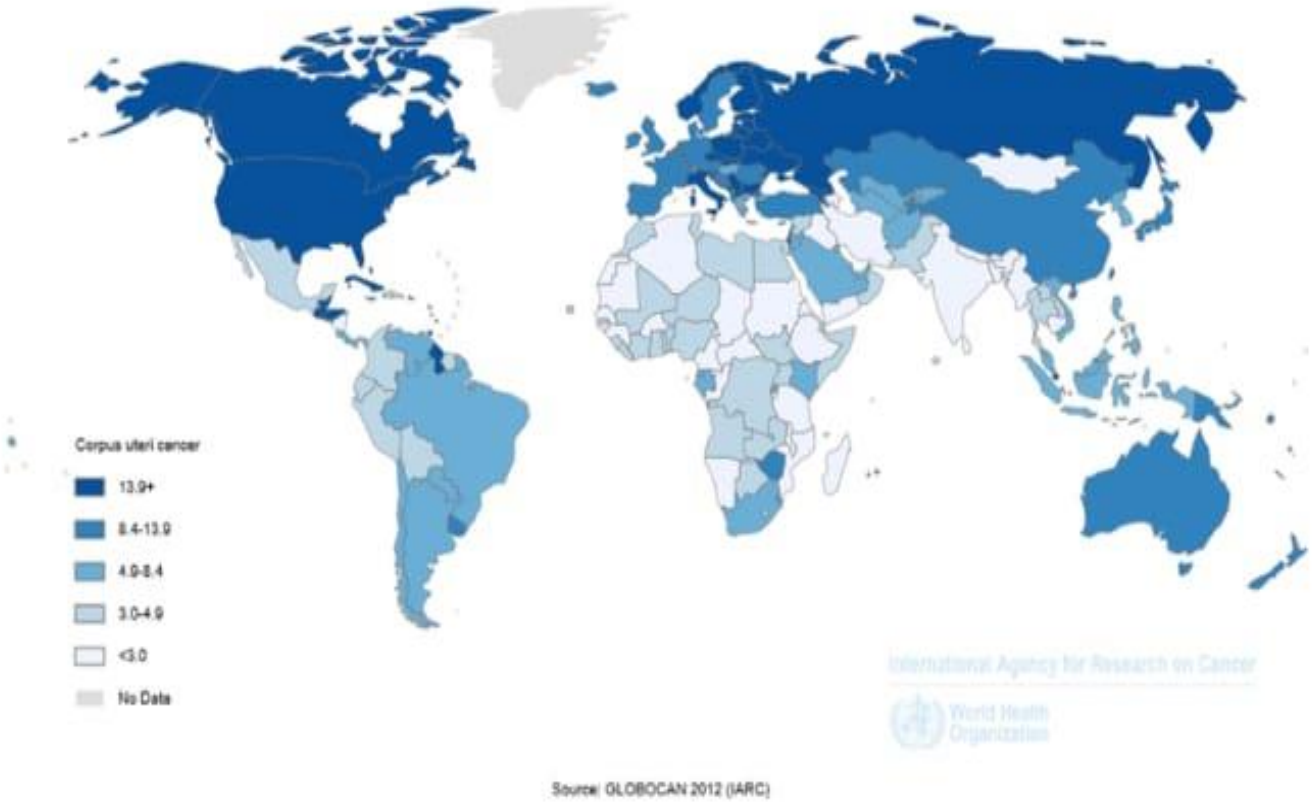
Endometrial cancer develops in response to the exposure of endometrial to unopposed estrogen which deals to hyperplasia and then dysplasia of the endometrial glands and hence is refffered to as adenocarcinoma multiple studies have demonstrated a strong association between intrinsic factors that cause increased serum estrogen .example:obesity and type II diabetes mellitus with endometrial adenocarcinoma.[1]

As described above carcinosarcomas were reclassified by the FIGO as an aggressive type of endometrial cancer and treated like type II endometrial cancer. The progenosis of carcinosarcomas is usally worse than that of grade 3 endometrial carcinomas.[2].

Endometrial cancer [EC] is the most common gynacologic malignancy in developed countrien and its incidence is increasing .It usually aries in post -menopausal women although 20-25%of ECs are diagnosed before menopause[3].

Uterine cancer incidence is highest in North America and Northern Europe, intermediate in Southern Europe and temperate South America and lowest in Southern and Eastern Asia and most of Africa[4].

Figure 1 –



Age-standardized incidence rates for corpus uteri cancer, GLOBOCAN, 2012 shows the age-standardized incidence rates for corpus uteri cancer using data from GLOBOCAN 2012.

This likely reflectus prevalence differences in risk factor including obesity and reproductive patterns .In the U.S.uterine cancer is the fourth most frequently diagnosed cancer,with estimate of 63,230 diagnosis in 2018(lifetime risk of 1 out of every 40 Women). The average annual age adjusted incidence of uterine cancer from the surveillance ,epidemiology and end result program (SEER) was 25.7 per 100,000 women between 2010-2014. The disease is rare before the age of 45

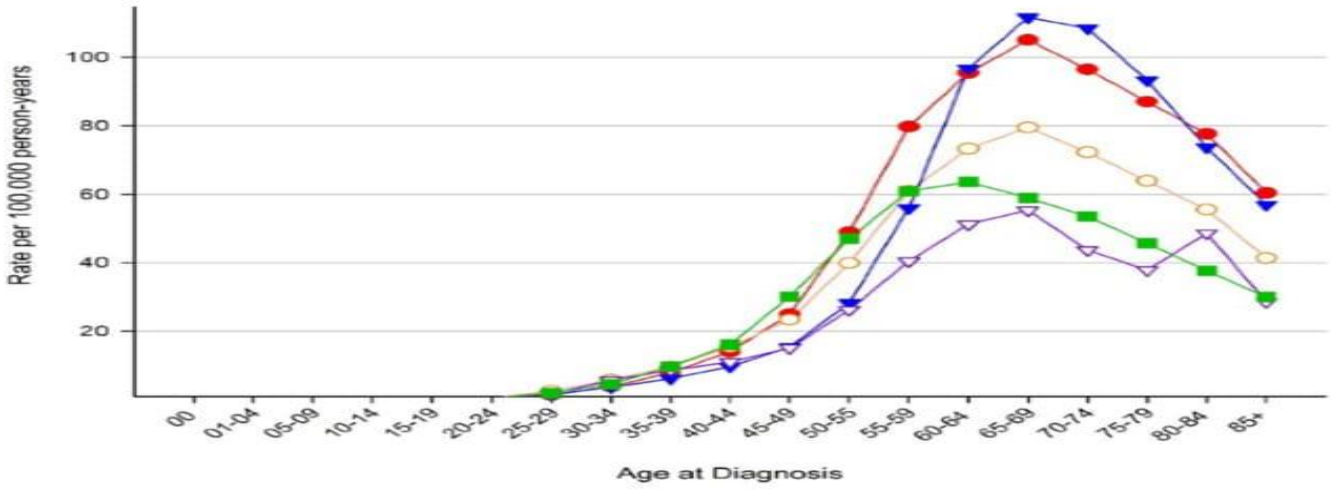
years but risk rises sharply among women of all races in their in their late 40s to middle 60s.(Fig.2)[5] uterine cancer can be divided into endometrial cancer affecting the epilthial lining and much less common mesenchymal malignancier which represent only 3%of uterine cancers[6].Although endometrial cancer can affect women of all ages it is most commonly diagnosed between ages 55 and 64 years with a medium age of 63 years[7].

2.SIGN AND SYMPTOMS :[8,9]

2.1.Classically,endometrial cancer present as postmenopausual bleeding .(PMB)and although this not only cause it must be excluded. In a 2018 study the pooled prevalence of PMB among women with endometrial cancer was 91% (95% cl,87%-93%) irrespective of tumour state.[8]

2.2.The development of cancer cells within the endometrium is mainly explained as a result of unopposed estrogen exposure especially with a concurrent lack of progesterone. This applies for the major type (80%) of uterine carcinoma known as type I mallgnacies.constituting of low grade endometrioid histology.They usually have an early diagnosis and an overall good progenosis. Type II malignancies (20%) on the other hand are less common.They have different histologic features.[9]

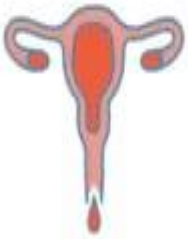
Figure 2 –



Age-specific uterine cancer incidence rates by race among U.S. women, SEER-18, 2003–2014 shows age-specific uterine cancer incidence rates among non-Hispanic White, Hispanic White, Black, American Indian/Alaskan Native, and Asian/Pacific Islander U.S. women using data from the SEER Program.

Uterine Cancer

Signs & Symptoms



Heavy vaginal bleeding

Menorrhagia

abnormal,watery or blood-tinged from the vagina

Painful sexual intercourse

Abnormal pap smear reports

Pain and difficulty while passing urine

Vaginal bleeding after menopause

Abnormal uterine bleeding

Pain in hips, legs, pelvis and lower abdomen.

Bleeding between periods

#becauseyourhealthmatters

NIRUJA HealthTech

3.Pathophysiology of endometrial cancer :

TYPE I cancer is due to unopposed estrogen ,while type II cancer is seen in postmenopausal women ,is not estrogen related ,and carries a poorer progenosis . Mutation in PTEN ,k-ras ,and microsatellite instability inception are common in type I ,while P53 and HER2/neu mutation are seen in type II. This classification provides important information regarding therapeutics and progenosis as well. The most common mutation is in p53 and HER/neu and has a poor progenosis[10].Endometrial cancer research has gained some momentum in recent years and in sights obtained from those studies have significant implications in the clinic[11]. Most endometrial cavinomas arises as a result of a sequence of somatic DNA mutations, such a PTEN , mismatch repair genes and TP53 have been shown tp play a pivotal role in serous endometrial cancer[12]

4.TREATEMENT:

Treatment options depend upon the endometrial cancer stage. Increasingly laparoscopic surgical methods are undertaken with equivalent syrvival rules and better postopelative recovery compared to open surgery[13].There is moderate quality evidence that chemotheraphy increases survival time after primary surgery by approximately 25%relative to radio theraphy in stage III and IV endometrial cancer[14].Uterine serous carcinoma is surgically staged and is likely to present with metastatic disease at diagnosis[15].systemic chromatography: The putative benefit of adjusted hormone theraphy with high dose gestagens has not yet been conclusively demonstrated[16].The optimal theraphy for endometrial cancer depends on the stage at diagnosis.Chemotheraphy is not the first-line treatment option for patients with stageI-III Endometrial cancer[17]. Surgical oncologists play a very important role in a management of patients with endometrial carcinoma. Total abdominal hysterctomy with bilateral salpingo - oophorectomy is the treatment of choice in patients with stage-I disease. The most common complication associated with total abdominal hysterctomy is an excessive loss of blood[18].

Stage I	Confined to the uterus
Ia	Tumor limited to the endometrium
Ib	Invasion to less than half of the myometrium
Ic	Invasion to more than half of the myometrium
Stage II	Extension to the uterine cervix
IIa	Endocervical glandular involvement only
IIb	Cervical stromal invasion
Stage III	Extension beyond the uterus
IIIa	Tumor invades serosa and/or adnexa, and/or positive peritoneal cytology
IIIb	Vaginal involvement
IIIc	Metastasis to pelvic or para-aortic lymph nodes
Stage IV	Invasion in neighboring organs or distant metastases
IVa	Tumor invasion of the bladder and/or bowel mucosa
IVb	Distant metastases including intra-abdominal or inguinal lymph nodes

treatment plan

4.PRECAUTION : Vitamin c may aid in the prevention of Endometrial cancer.This vitamin ascorbic acid has been reported in many studies significally reduce the risk of developing

Endometrial cancer. Vitamin c has been proposed to reduce the activity of a key protein called hypoxia inducible in endometrial tumor cell survival[19].Possibly associated with in increasing risk of endometrial cancer.Retrospective studies have shown increased endometrial cancer risk with high meat consumption and vegetable intake[20]. Vitamin A is an essential vitamin that is found in plants and stored in the liver .it is part of a family of pigments found in plants called the cartenoids which are normally yellow. The most well known of the cartenoids is called betacarotene which under the actions of bile acids is converted in retinal then into the active form of vitamin A.Vitamin A and some Vitamin A derivatives are active at retinoic acid receptors where they act as transcriptional regulators where they act as transcriptional regulators[21].The risk of developing Endometrial cancer is greatly reduced in women taking calcium supplement or who consume calcium-rich foods.Dairy foods such as seafood, leafy greens ,legumens, dried fruit and tofu have all been shown to significantly reduce Endometrial cancer risk, suggesting that research into calcium supplementation in the prevention and potential treatment of EC would be useful as it is for Korean breast cancer survivors who show longer survival when supplement containing calcium are consumed[22].

5.CONCLUSION: Several quality of life concerns exists for women treated with radiation therapthy for gynecolgic malignancies. Significant overlap exists in the QOL issues affecting these patients.whether to combine or separate surveys by diagnosis treatment type, age or time point should be explored further. Assessing patients psychological,emotional,and physical concern helps to understand long-term adjusted enabling incorporation of these domains into future trials that will ultimately improve patients well being.

Endometrial cancer begins in the layer of cells that form the lining (endometrium)of the uterus.

.The exact causes of endometrial cancer is unkown .

.obesity,hormonal inbalances and nulliparity are risk factors of endometrial cancer.

.vaginal bleeding ,pelvic pain,dyspareunia ,dysuria are the symptoms of Endometrial cancer.

.Treatment depends on the stages and grade of the cancer and the general health of the woman.

Endometrial carcinoma has the best progenosis due to early presentation(PMB).

.Disease stage is the most prediective factor for survival.

.Lymph mode metastatic is the most predictive factor for survival in early stage endometrial carcinoma.

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