CANCER OF THE VULVA

Cancer of the vulva is not a common disease. There are about 4,000 new cases each year in the United States. Although it can occur in women in the third and fourth decade it is usually diagnosed in older women. Over 95% of vulvar cancers arise from the squamous epithelium. The remainder are mostly melanomas. The cause of squamous cancer of the vulva is unknown but there is a weak association with Human Papilloma Virus (HPV). The most important feature about vulvar cancers is the premalignant phase.

PREMALIGNANT VULVAR CHANGES (DYSPLASIA)

The premalignant phase of vulvar squamous cell cancer has several different names: carcinoma-in-situ, vulvar intraepithelial neoplasia grade III, (VIN III), severe dysplasia and Bowen's disease. This condition is diagnosed by tissue biopsy and is characterized by a full thickness disorder of maturation of the squamous epithelium. It is usually symptomatic with itching and burning and can be present for years. It is usually misdiagnosed as a yeast infection and a multitude of anti-fungal agents will have been prescribed, none of which will have been effective. It is easy to see on examination and will appear as a raised red, white or pigmented patch. A simple biopsy will confirm the diagnosis. It is best treated by excision or sometimes by laser evaporation. If a large area is involved and must be removed, then a skin graft can be applied. These premalignant conditions are likely to recur after treatment so continued follow up is a necessity. Another condition that can occur on the vulva and also cause itching and soreness is called lichen sclerosis. It is not a premalignant change, but an atrophy of the skin. It will not be improved by anti-yeast medications either. It can be diagnosed by biopsy. These two conditions, lichen sclerosis and VIN III, can be present for years and be misdiagnosed as yeast infections.

The most important point about premalignant vulvar changes is that there is usually a long delay in diagnosis. Often these women are not examined properly or the examiner is unfamiliar with this condition and prescribes yet another course of cream, salve, or ointment. Usually the condition is fully visible and simply needs to be biopsied to establish the diagnosis.

INVASIVE VULVAN CANCER

Squamous cell cancer of the vulva usually causes pain, soreness and itching. There is usually an obvious growth on the skin or an ulcerated area. Diagnosis is by simple biopsy. These cancers are usually slow growing and do not spread early. When they do spread it is usually by way of the lymph nodes. The regional lymph nodes are located at the top of the thigh in the groin area. Vulvar cancers are staged by a combination of examination and surgery. The TNM staging system is used.

T- N- M STAGING OF VULVAR CANCERS

T-0 pre-malignant change
T-1A a cancer less than 2.0cm in diameter and less than 1.0mm in depth of invasion
T-1B a cancer less than 2.0cm in diameter but greater than 1.0mm in invasion
T-2 greater than 2.0 centimeters in diameter
T-3 involves vagina, urethra or anus
T-4 involves bladder, rectum or pelvic bone
N-0 no lymph nodes involved
N-1 lymph node metastases to one groin
N-2 lymph node metastases to both groins
M-0 no distant metastases
M-1 any distant metastases
TREATMENT OF VULVAR CANCER

Vulvar cancers are usually treated by surgery with a radical excision of the cancer and removal of the regional lymph nodes. If the cancer is clearly on only one side and small then only that one side may need to be removed. Radical excision means that there must be a good margin of uninvolved tissue removed with the cancer. Usually an acceptable margin is about two centimeters. This will result in some disfigurement if the cancer is larger than about two centimeters in size. Large cancers will also require some sort of plastic surgery technique to close the defect. Complications of surgery are closure breakdown with prolonged healing and sometimes a collection of fluid in the groin where the lymph nodes where removed. There may also be leg swelling.

If the cancer is very large and a radical resection would require removal of the anus, rectum or urethra then primary treatment can be given by radiation to preserve these vital structures. If there is cancer in the lymph nodes then that groin as well as the pelvic lymph nodes are irradiated upon recovery from surgery. Often when these cancers are being irradiated chemotherapy will also be given to increase the effects of the radiation.

The prognosis is in general good. If the lymph nodes are negative then the chance for a cure is excellent. Even with positive lymph nodes a significant number are cured.

Vulvar melanoma is no different from melanomas that occur elsewhere on the body. They are unpredictable and can be very aggressive. They are treated surgically if possible. The regional lymph nodes are usually removed at surgery. Melanomas are characteristically black in color, however there are amelanotic melanomas that are not pigmented and can be confused with the usual squamous cell cancer.