CARCINOMA OF VULVA IN SINGAPORE: A REVIEW OF 12 CASES

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SYNOPSIS

Twelve patients with carcinoma of the vulva are reported. Unlike in most reports, a high incidence in younger age groups is found in this series. A positive serology for Syphilis was present in 33.3%. Leukoplakia was noted in 16.7% of our patients. There is a tendency for patients to seek treatment late; 50% of patients in this series had symptoms for over a year before presenting themselves at the Gynaecological clinic. Radical vulvectomy is the treatment of choice and it is our experience that pelvic lymphadenectomy is unnecessary if there is no metastasis to the gland of Cloquet. The good survival rate found in this series could be attributed to the young age group of the patients who are good operative risks.

Carcinoma of the vulva is uncommon. It is a disease of slow development. As recently as 1939, the cure rate for the disease was in the region of 15% (Way, 1960). However, with better understanding of the nature, mode of spread of the disease and a more extensive surgical approach, improved survival rates had resulted. The following study was undertaken to review our experience in the management of this condition.

MATERIAL AND METHODS

During the period from January 1, 1963 to September 31, 1971, twelve patients with carcinoma of the vulva were treated in the University Department of Obstetrics and Gynaecology, Kandang Kerbau Hospital for Women, Singapore. Excluded from this series were cases of carcinoma of the urethra, vagina and Bartholin's glands. Eleven patients were followed up regularly in our Cancer Follow-up Clinic up to the time of this report.

RESULTS

Ethnic Groups

Out of the 12 cases, 11 were Chinese and one Malay. The series was too small for statistical evaluation of racial incidence.

Age

The age distribution of the patients is shown in Table I. The patients' ages ranged from 28 to 84 years, with a mean of 54 years. Although the disease is said to be more common in old people, it was found in a considerable number of comparatively young women in our series. Eight patients (66·7%) were below the age of 60 years.

Parity

Five patients were nulliparous, four were secundiparae and all others were multiparous.

Leukoplakia

This was present in two patients (16·7%). No other chronic epithelial dystrophies were found in the remaining ten cases.

Venereal Disease

Four patients (33·3%) had a positive serology for syphilis. One patient had extensive condyloma acuminata two and a half years prior to the development of vulval cancer. There were no cases with granuloma inguinale or lymphogranuloma venereum.

TABLE I

Age	No. of Cases
21-30	1
31-40	2
41-50	3
51-60	2
61-70	2
71-80	1
Over 80	1
TOTAL	12

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Presenting Symptoms

These are shown in Table II.

TABLE II

Presenting Symptoms	No. of Patients
Vulval swelling - -	8
Discharge per vaginam -	6
Pruritus vulvae - -	5
Vulval ulcer - - -	4
Pain over swelling/ulcer -	2
Loss of weight - -	1

Duration of Symptoms

The duration of symptoms is shown in Table III.

TABLE III

Duration	No. of Patients
< 1 month - - -	3
1 to 12 months - -	3
> 12 months - - -	6
TOTAL	12

It is interesting to note that six patients (50%) did not seek medical advice despite having symptoms for over a year. One patient had ignored a vulval swelling for 15 years till it began to grow rapidly and ulcerated.

Anatomical Sites of Lesion

This is shown in Table IV.

TABLE IV

Site	No. of Patients
Labia—Right - -	4
Left - - -	4
Bilateral - - - -	3
Clitoris - - - -	1
TOTAL	12

Local Spread

Spread to the distal one to two centimetres of the vagina occurred in three patients. The anal margin was involved in two patients. Extension to the periosteum of the pubic bone was present in one case.

Palpable Groin Nodes

Palpable nodes were present in six cases, two of which were histologically positive. In none of the six patients with non-palpable nodes was there histological evidence of metastases.

Treatment

The plan of therapy was individualised depending on the general condition of the patient and the extent of the disease. Radical vulvectomy with primary wound closure was carried out in 10 cases. The operative technique was modified from Stanley Way procedure, the excision of the vulva being limited laterally by the labio-crural fold except in two cases where the tumour had involved the posterior one third of the vulva. The superficial and deep inguinal, femoral and external iliac nodes were removed in all these ten cases. Excision of apparently healthy vagina 2 cm. from the tumour edge was performed whenever indicated.

Simple vulvectomy were carried out in two patients whose general condition precluded a more extensive surgical procedure.

Post-operative Mortality and Morbidity

None of the 12 patients died as a result of the operative treatment. The significant post-operative complications are shown in Table V.

TABLE V

Wound breakdown - - -	12
Urinary tract infection - -	12
Persistent lymphoedema of the lower limbs - - - -	4
Femoral artery rupture - -	1
Stress incontinence - - -	1

As to be expected, the main complications were wound breakdown and urinary tract infection which occurred in all patients. Only four patients required skin grafting. The wound healed by secondary intention in the remaining 8 patients.

Recurrence

Local recurrence of growth after radical vulvectomy occurred within one year in one patient. Recurrence developed along the line of excision five months after the operation. Local excision of the recurrence was carried out three times. An anterior exenteration was finally performed when the recurrence involved the urethra and the bladder. This patient is now well and free from recurrence five years after the initial operation. Another patient had inguinal node metastasis five months after simple vulvectomy and died five months later.

Follow Up

One patient defaulted and we were unable to trace her. The remaining 11 patients were seen regularly at the Cancer Follow-up Clinic at intervals of three or six months. The follow-up period of these 11 patients varies from 3 months to 8 years. Except for one death, the remaining ten patients were healthy and free from recurrence. Four patients have survived for more than 5 years.

DISCUSSION

Vulval carcinoma is a disease of elderly women. Green *et al* (1958) in their series of 238 cases found that only 30% of the patients were below 60 years of age. Boutselis *et al* (1963) also reported a similar incidence of 27·2% in patients below 60 years. In our series 66·7% of patients were below 60 years. This could be the result of the low socio-economic status and the high incidence of venereal disease in these patients. The great advantage is that these patients are usually good operative risks, probably accounting for the good survival rate.

The association of venereal disease with vulval cancer is well documented. Eight of nine vulval carcinoma in Negro patients in Taussig's (1940) series of 155 cases were preceded by Syphilis or Post Syphilitic granuloma. In this study, positive serology test for Syphilis was noted in 33·3%. In one case, there was an association of condyloma acuminata with the development of vulval cancer.

Leukoplakia has been considered by many authors as pre-cancerous. Green *et al* (1958) found 58% of their patients with carcinoma of vulva with coexisting leukoplakia. This lesion is present in 16·7% of our patients.

Numerous reports attest to the prolonged delay in diagnosis of the disease. This delay often results from patients failing to turn up early for treatment despite the presence of symptoms. This was confirmed in our series. 50% of our patients had symptoms for over a year before presenting themselves at our clinic.

Radical surgery is the treatment of choice. The important factor affecting curability is whether or not an adequate operation is performed and this implies a radical vulvectomy with dissection in continuity of superficial and deep nodes of the femoral triangle, groin and pelvis. In recent years, doubt has been expressed as to whether pelvic lymphadectomy is indicated when groin nodes are free of tumour (McKelvey and Adcock, 1965). Way (1960) found involvement of pelvic lymph node in only 3% of his patients in the absence of superficial lymph node involvement. Collin *et al* (1963) reported six of 71 patients with tumour involvement of the pelvic lymph nodes; only two of these patients did not have a recognisable metastasis in the superficial nodes. Our experience confirms these observations. There were no histologically positive pelvic nodes in cases where there were no metastases to the superficial nodes.

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