MANAGEMENT OF CARCINOMA VULVA

(Twenty-Five Years Experience)

by

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In the previous paper epidemiological aspects of 169 cases of carcinoma of vulva attending Chittaranjan Cancer Hospital from 1952 to 1976 have been analysed. Out of these 169 cases, treatment could be given to 103 cases only. Amongst the rest, 41 were in advanced stage and beyond the scope of treatment. Another 25 cases did not turn up for treatment in spite of our best efforts. Evaluation of different protocols of treatment adopted for these 103 cases will be discussed in this paper.

Treatment

The outstanding work of Way (1978) in the treatment of carcinoma of vulva has proved beyond doubt that surgery is the ideal type of treatment in the management of these cases. Ninety-one out of 103 cases in the present series were treated by surgery, including 3 with pregnancy. One of these 103 cases was in advanced stage of disease with destruction of whole urethra and came with retention of urine. Except doing suprapubic cystostomy no further treatment could be given to her.

We have modified the technique of operation from that of Way (1978) in the following respects:

1. The skin incision is not given in the manner Way gives. It is more or less a straight line incision starting from a point 3 cm. above and internal to anterior superior iliac spine upto the mid point of inguinal ligament and then extending downwards upto the apex of femoral triangle.

2. Skin is not removed, rather skin flaps are dissected away keeping a thin layer of superficially fatty fascia with it. The whole thickness of fascia together with the fatty tissue including inguinal and femoral group of glands and gland of cloquet if present are removed.

3. Inguinal ligaments are not cut.

4. Sartorius muscles are not detached as done by Way.

5. External iliac, internal iliac and obturator group of glands are removed on both sides. Common iliac glands are not removed as we feel if common iliac glands are involved, there is no point in doing the surgery.

6. Incisions on vulva are given separately. The incisions start from mons veneris along the labiocrural folds upto the perineum on both sides and inner incisions are given on the vulvo-vaginal junction depending upon the involvement of vagina.

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7. Another important point to mention is that during inguinopelvic block dissection 2 surgeons (myself on one side and first assistant on the other side) do the operation at the same time, thereby saving one hour's time and also saving these elderly women from the onslaught of extra one hour's anaesthesia.

The whole idea of not removing the skin is

(i) to prevent loss of plasma exudate
(ii) to prevent infection, and
(iii) to prevent erosion of femoral vessels

Not a single incident of bleeding occurred in this series due to erosion of femoral vessels.

Table I shows the different protocols of treatment given to these 103 cases.

TABLE I
Different Protocols of Treatment

Methods of Treatment	No. of cases
Surgery	75
Surgery and Chemotherapy	9
Surgery and Radiation	7
Radiotherapy	6
Chemotherapy	5

*One case had suprapubic cystostomy and not included in the above protocols of treatment.

Out of 75 cases treated by surgery, 65 had radical vulvectomy with bilateral inguino-pelvic block dissection, and 10 had wide excision of vulva. The reasons for doing wide excision of vulva in these 10 cases were the following:

(i) Seven enderly women above 70 years with general debility and hypertension, 2 of them had heart disease also.
(ii) One had intra-epithelial carcinoma.
(iii) One had atypical basal cell hyperplasia with leukoplakia with cracks and fissures in an young woman of 20 years.
(iv) One was carrying a pregnancy of about 28 weeks and wide excision was done as we did not like to disturb the pregnancy. She had elective caesarean section at 38 weeks of pregnancy. She refused to be operated again for inguino-pelvic block dissection.

Nine cases were treated with Methotrexate alone with surgery. In 1963 the author started to treat an advanced cancer of vulva with Methotrexate purely on experimental basis (Roy, 1965). This patient had an elective caesarean section in another hospital about a fortnight ago. The case was so advanced that surgery was out of question. 10 mg. Methotreate was given per day for 5 days with a gap of 7 to 10 days in between 2 courses. It was surprising to find that with 350 mg. Methotrexate the growth on the vulva gradually regressed in size and the enlarged inguinal nodes where metastases was found on histological examination, also regressed. But after 8 courses of the treatment with the drug the growth started to increase and radical vulvectomy with bilateral inguino-pelvic block resection was done. The growth again recurred 3 months after the operation on the so called vulval area. Methotrexate was started again but there was no regression and the patient died within a year. Encouraged with this temporary success, another 8 cases were treated with Methotrexate and surgical procedures could be undertaken due to regression of the growth. In 2 of them wide excision of vulva was done. Methotrexate was continued during postoperative period in 3 of these cases.

Seven cases who were treated with surgery and radiation, radium needles were implanted in the growth in 2 of them along with central source of radiation for vaginal extension of growth. Wide excision of vulva had to be done in these cases because of recurrence of growth within few months. The rest 5 cases were radiated because of metastases in the glands and groin.

Six cases were treated by radiation, 5 of them were in advanced stage of disease and one though in operable stage, refused operation. It might be mentioned here that after 1962 external radiation was not given to any patient in this series.

In this series 5 cases who were in advanced stage were treated with cytotoxic drugs. In 3 of these cases combination therapy with Methotrexate, Chlorambucil (Leukeran) and Endoxan was used and in other 2 with Methotrexate alone. The treatment was purely palliative with the hope that if the growth regressed, surgery could be done later on. Though there were subjective improvement in some of these cases, the growth did not regress at all and all of them died within 1 year. Deepe, Bruckner and Cohen (1977) treated 4 patients with Adriamycin and obtained regression of tumour in 3 of these, whereas Guthrie (1978) treated similar number of patients with Adriamycin but without any success.

A point may be mentioned here about the cases with pregnancy. The treatment in 2 of them had already been mentioned. The third one carrying 16 weeks of pregnancy was in advanced stage and died within 1 week of admission. In the fourth case elective caesarean section was done along with radical vulvectomy with inguino-pelvic block dissection in the same sitting.

Regarding 4 cases of procidentia, 2 were treated and had vaginal hysterectomy with repair of pelvic floor along with radical vulvectomy and inguino-pelvic block dissection in the same sitting. The other 2 could not be treated.

There was 1 case of vesico-vaginal fistula along with carcinoma of vulva. Repair of vesico-vaginal fistula was undertaken first and after 1 month radical vulvectomy with bilateral inguino-pelvic block dissection was done.

Lymph Node Involvement

Out of 91 operated cases, 14 had wide excision of vulva and lymph node involvement in these cases could not be studied. The lymph node involvement in the rest 77 cases was studied.

Lymph node involvement is shown in Table II.

TABLE II

Lymph Node Involvement in 77 Cases

Glands	No. of cases
Negative	54 (70%)
Positive	23 (30%)
Inguinal	16
Femoral	3
Cloquet	8
External Iliac	1
Internal Iliac	1
Obturator	0

Metastases in lymph node was found in 23 cases (30 per cent). Of these inguinal and femoral nodes were involved in 18 cases. Cloquet's gland was involved in 8 cases, of which 3 were in association with inguinal and femoral nodes. Deep pelvic nodes were involved in 2 cases only (2.6 per cent), of which external iliac in 1

case and internal iliac in another. There was no involvement of obturator gland in this series.

Of the node involvement cases, unilateral involvement was found in 74 per cent and bilateral involvement in 26 per cent. Only in 1 case, both inguinal and deep pelvic nodes were involved.

In Way's (1978) large series of 247 cases, 52 per cent had lymph node involvement, whereas in Collins *et al*'s series (1971) lymph node involvement was 31.6 per cent which tallies with the present findings also (30 per cent).

Primary Mortality

One case in this series died within 12 hours after operation due to pulmonary embolism.

Complications

Rectum was injured in 1 case which healed after repair. There were several cases of lymphoedema which gradually subsided.

Failure of primary healing of the wound is a problem for which we have modified our skin incision. The thighs are routinely tied up in order to prevent tension on the stitches and proper drainage is given.

Recurrence

There were 13 cases of local recurrence, of which 2 were after radium application and 11 after surgery. Analysing the cases of recurrence after surgery it was observed that in 4 cases metastases were present in lymph nodes. Besides these, 3 had systemic metastases and all had positive nodes. Collins *et al* (1971) studying on positive node cases reported the incidence of local recurrence 7.7 per cent, 38.5 per cent of systemic recurrence and 26.7 per cent combined local and systemic recurrence.

Of 16 cases of recurrence in this series including the systemic one, 5 were treated with cytotoxic drugs. Two of them died within 1 year and the other 3 survived 5 years.

Five Year Salvage Rate

No results of treatment on carcinoma will be complete until it is evaluated by 5 year survival rate. From 1952 to 1973, 89 cases were treated and the results of treatment are shown in Table III.

The five year survival rate by means of surgery including radiation and chemotherapy is 54.3 per cent and the total salvage rate is 52.8 per cent. Our results compare favourably with that of Way (1978) which is 48.1 per cent.

TABLE III

Five Year Survival Rate (from 1952 to 1973)

Methods of treatment	No. of cases	5 Year Survival	Lost sight of
Surgery + Radiation + Chemotherapy	81	44 (54.3%)	11
Radiation	6	3 (50%)	nil
Chemotherapy	2	0	nil
Total	89	47 (52.8%)	11

The 5 year Survival rate of gland positive and gland negative cases have been assessed and is shown in Table IV.

TABLE IV
Five Year Survival Rate of Nodal Metastases

	No. of cases	5 Year survival	Lost sight of
Gland Negative	47	32 (68%)	9
Gland Positive	22	9 (41%)	2

The five year survial rate of gland positive cases in this series was 41 per cent compared to Way's 62.8 per cent (1978) and that of gland negative was 68 per cent compared to Way's 83.7 per cent. Our results would have improved further if the number of lost sight of cases could be minimised.

Discussion

During 25 years of study on carcinoma of the vulva in Chittaranjan Cancer Hospital, Calcutta which is a specialised cancer institue, only 195 cases were seen. Due to infrequency of this disease Browne (1939) suggested that patients with this disease should be referred to special centres which could handle sufficient numbers to become really expert at them. By establishing such a special centre at New Castle, Way could get the opportunity of seeing more number of these cases which made him possible to modify his operative techniques several times in order to tmprove the salvage rate. His techniques of surgical approach had benefitted gynaecologists all over the world working in this field. It is advocated to establish such types of special centres so that one could get the opportunity of seeing more number of cases to become really expert at them.

As regards the treatment, surgery is undoubtedly the method of choice for these cases. In this series surgical procedures were adopted in 91 out of 103 cases. Our surgical technique is a little different from that of Way as we do not remove the skin, inguinal ligaments are not cut and and sartorius muscles are not detached. In order to save time 2 surgeons operate at the same time during inguino-pelvic block dissection and thereby saving these elderly patients from the onslaught of extra one hour's anaesthesia.

Regarding the involvement of lymph nodes metastases were present in nodes in 23 out of 77 cases, of which in 2 cases only deep pelvic nodes were involved (2.6 per cent). In Way's series (1978) 22 per cent of all patients subjected to operation had deep nodes involvement and of these, slightly less than a quarter survived. The question comes "should we routinely remove the deep pelvic nodes in all cases?" Way (1978) said "This had been the subject of much debate and will, no doubt, continue to be so for a long time to come." Previously the primary mortality was high, that is why this question arose. Now the primary mortality has come down to a great extent due to improvement in the technique of anaesthesia, availability of blood and antibiotics. In the present series, only 1 patient died. However, the cases should be selected before subjecting them for such extensive type of operation.

It has been suggested recently to give external radiation to those cases who have metastases in superficial nodes to irardiate lateral walls of pelvis, including the deep nodes. Seven cases were radiated following surgery in this series and 2 of them survived more than 5 years. Besides these, 6 other cases were

treated only by radiation and 3 of them survived more than 5 years.

A point may be mentioned here about the place of cytotoxic drugs in the treatment of this disease. Altogether 14 cases were treated, 9 in association with surgery and 5 by cytotoxic drugs alone. Of the 9 cases treated with surgery, only 1 survived for 5 years. But those who were treated by cytotoxic drugs alone, none survived. However, with these drugs, subjective symptoms will be alleviated and in some cases surgery will be possible due to regression of the growth. That will be a great relief to these patients who are suffering a lot.

Summary

1. One hundred and three cases were treated. Ninty-one of them were operated, 7 of these were treated by radiation and 9 by chemotherapy. Our surgical technique is different from that of Way. However, before undertaking any surgical procedure it is advocated that cases should be individualised and type of surgery to be done is to be planned beforehand. Six cases were treated by radiation.

2. Five cases were treated by chemotherapy alone and none of them survived. However, it is advocated to treat these advanced cases of cancer vulva by cytotoxic drugs. In some of these cases the growth may regress with these drugs and may allow surgical intervention.

3. Five year salvage rate of surgery including radiation and chemotherapy was 54.3 per cent and total salvage rate 52.8 per cent.

4. Lymph node metastases was 30 per cent. Five year salvage rate of positive lymph node cases was 41 per cent whereas that of gland negative cases 68 per cent.

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