

MANAGEMENT OF INOPERABLE OVARIAN CANCERS

by

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During 1972-78 total 89 inoperable cases of ovarian Cancer were registered at J.K. Cancer Institute, Kanpur. Majority of these cases were referred from L.L.R. and other hospitals associated to G.S.V.M. Medical College, Kanpur for management after primary surgical treatment. No particular predilection to the religion, caste or profession was seen. The age of these patients varied from 26 years to a maximum of 69 years. The peak incidence was observed in the 5th decade of life followed by 6th and 4th decades respectively (Table I).

TABLE I
Age Incidence

Age	No. of cases	Percentage
21-30	5	5.62%
31-40	21	23.60%
41-50	33	37.08%
51-60	24	26.97%
61-70	6	6.74%

In general ovarian cancers grow insidiously and can reach a huge size before causing enough symptoms to bring the patient to the physician. Main presenting symptoms in order of pregnancy are given in Table II.

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TABLE II
Presenting Symptoms

Presenting Features	No. of cases	Percentage
1. Mass lower abdomen	79	88.76
2. Lower abdominal pain	75	84.27
3. Fullness of abdomen	51	57.30
4. Dysuria	23	25.84
5. Constipation	14	15.73
6. Irregular vaginal bleeding	12	13.84

Amongst these 89 patients, only 47 (52.81%) were found fit for exploration so these were subjected to laparotomy but on opening they proved to be inoperable so abdomen was closed only after taking the biopsy, histology of these cases revealed adenocarcinomas of various types in 33 cases (70.21%), out of which the serous type was the commonest. Remaining 42 patients (47.19%) were found to be inexplorable and were labelled ovarian cancers on the basis of clinical examination and presence of malignant cells in the ascitic fluid on cytological examination. In majority of these further histological details could not be obtained.

After thorough clinical, haematological and radiological examination all these patients were subjected to radiotherapeutic and/or chemotherapeutic treatment with palliative aim. Thirty-nine of them

with large pelvic masses and moderate abdominal spread having good general health were subjected to whole abdominal irradiation by cobalt 60 strip technique giving a tumour dose of 3000 rads in 8 exposures, alongwith additional pelvic irradiation (T.D. 3000 rads in 3 weeks). Remaining 50 patients with widespread abdominal and/or intra-abdominal disease were subjected to systemic chemotherapy. After completion of chemotherapy, they were further assessed and 27 who were found fit were further subjected to boost radiotherapy to the residual masses (T.D. 3000-4000 rads in 3-5 weeks by Cobalt 60). Remaining 23 patients received chemotherapy only as they were not found fit for further radiotherapy due to widely disseminated disease, marked ascites, intestinal obstruction, general debility etc. Amongst these, 11 cases which were having marked ascites causing respiratory and abdominal distress were further subjected to aspiration of ascitic fluid and intraperitoneal instillations to thio-tepa 30 mg (in 6 cases) or cyclophosphamide 1000 mg (in 5 cases) along with 2C.C. of decadron and 1 gm. of streptomycin which proved to be quite effective.

The doses and routes of administration of chemotherapeutic agents used alone or

in combination for systemic use are given in Table III.

Immediate systemic reactions were seen in most of the patients in the form of nausea, vomiting and loss of appetite etc. These were more marked during the beginning of the treatment and were easily controlled by antiemetics and antihistaminics. Local radiation reactions in the form of proctitis and cystitis were seen in the cases subjected to pelvic irradiation and were more marked towards the end of the treatment. In majority of cases there was mild to moderate diarrhoea which was easily controlled by opiates, antispasmodics and corticosteroids. In some cases systemic and local reactions were severe and in addition to above medical treatment they required stopping of treatment for few days and/or lowering of daily doses for their control.

During treatment all the cases were examined weekly and then at the end of the treatment for systemic and local reactions, regression of lesion and general condition of the patient. Total leukocyte count (T.L.C.) was done every week. Heavy doses of corticosteroids were given if T.L.C. were below 4000/Cu.m.m.

TABLE III
Systemic Chemotherapeutic Agents for Ovarian Cancers

Agent	Dose and Route of administration	Remark
1. Chlorambucil	10-15 Mg orally daily for 3-4 weeks	Repeated after 4-6 wks.
2. Methotrexate	20 Mg I/V daily x 4	Repeated after 4-6 wks.
3. Cyclophosphamide	1500 Mg I/V Weekly x 4	Repeated after 4-6 wks.
4. Combined chemotherapy— (A) Methotrexate 15 mg. (B) Cyclophosphamide 1000 Mg. (C) Vincristine 2 Mg.	} I/V Weekly for 3-4 Weeks	} Repeated after 4-6 wks.

of blood. In addition to this the treatment was interrupted for some time and/or blood transfusions were given if T.L.C. were below 3000/Cu.m.m. of blood. The treatment was restored only when T.L.C. reached above 5000/Cu.m.m. of blood.

All the cases were followed up monthly upto 3 months, then 2 monthly subsequently. Each follow up consisted of history taking, general examination and routine blood examination. Patients with metastases and late complications were investigated accordingly.

Even after full efforts, only 68 cases (76.41%) and 42 cases (47.19%) were available for 1 year and 2 years or more follow ups respectively. Over all, 1 year and 2 years or more survival rates were 39/68, (57.35%) and 15/42, (35.71%) respectively (Table IV).

is long survival inspite of the continued presence of the growth.

Radiation techniques and survival rates in advanced ovarian cancers have not much changed over the last half century. The results are still poor, although occasional good palliative effect has been obtained. Occasionally, there is sufficient suppression of growth to permit comfortable survival for many years, although actual cure rarely occurs. For some of these cases certain chemotherapeutic agents such as Chlorumburcil, Thio-tepa, Cyclophosphamide, methotrexate, Vincristine, 5 flurouracil and Actinomycine-D etc. have a definite suppressive action when used alone or in combination or radiotherapy, resulting in long term survival of the patients before they finally succumb to the neoplasm.

As evident from Table IV the response

TABLE IV
Survival Rate

Group	One year survival Rate			Two years or more survival Rate		
	Cases followed	Survival	%	Cases followed	Survival	%
Radiotherapy alone	32	22	68.75	26	10	38.46
Radiotherapy and Chemotherapy	22	12	54.55	18	4	22.22
Chemotherapy alone	14	5	35.71	13	1	7.69
Total	68	59	51.35	42	15	35.71

There have been no notable improvement in earlier diagnosis of carcinoma of ovary. They are silent for long and are generally incurable by present methods when they are finally discovered. Ovarian cancer behaves in an unpredictable fashion, sometimes death occurs in short period while at other times there

to treatment is very superior in the cases subjected to radiation alone and worst in the cases subjected to chemotherapy alone. But it does not really reflect the superiority of radiotherapy over chemotherapy. It can be explained on the basis of criteria of selection of cases for various methods of treatment.

Based on our experience it was roughly possible to choose patients for either radiation or chemotherapy alone or in combination. Patients with disease in the pelvis, omentum and relatively less in the viscera received an aggressive radiation to the abdomen and further boost to the pelvis. On the other hand, if the disease was extensive in the peritoneal viscera without complications and debility, the emphasis was on chemotherapy and after completion of chemotherapy if

the condition of the patient permitted, further treatment to the residual masses was given by radiotherapy. On the other hand, the patients with widely disseminated disease, marked ascites, intestinal obstruction and general debility were treated by chemotherapy alone, since intensive radiation is poorly tolerated by these patients. Intraperitoneal instillation of Thio-tepa and Cyclophosphamide are encouraging in controlling distressing ascites.