

MALIGNANT MIXED MESODERMAL TUMOUR OF GENITAL TRACT : A REVIEW OF SEVEN CASES

* K.S. DAVE ● A.D. DESAI ● M.H. MANKAD ● A.S. MEHTA
S.M. PATEL ● P.S. DAVE ● A.S. KAPADIA

SUMMARY

A retrospective review of 7 cases of MMT has been made. Five had homologous and 2 had heterologous MMT. All patients were postmenopausal and multipara. Mean age of patient was 59.2 years. Six out of seven had associated constitutional factors like obesity, hypertension diabetes and ischaemic heart diseases. FIGO pathologic stage was ranging from I to IV. Primary surgical approach is essential to delineate the extent of disease. Extent of disease is predictor of outcome. Deep myometrial invasion is also associated with poor outcome and stromal involvement. So invasion does not correlate with survival which was also observed by Macaset et al (1965).

INTRODUCTION

Malignant mixed mullerian tumours (MMMT) are neoplasms which include carcinomatous and sarcomatous elements, often intimately admixed in many different patterns. Although they are uncommon tumours in female genital

tract, their clinical and histopathologic attributes have been well characterized. The histogenesis of these particular entities however is still not completely understood. They may arise in any organ of the female genitalia including ovary, tube, cervix, the greatest majority of MMT arises from uterine corpus. We have studied 7 MMT.

MMMT includes the homologous

Dept. of Gyn Oncology, Gujrat Cancer & Research Institute, Ahmedabad.

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MMMT and heterologus MMT. Tumour should not be placed in heterologus group unless there is definitive histologic evidence of tissue not normally found in the uterus, such as bone cartilage or skeletal muscle.

These tumours are aggressive. They spread early to regional lymphnodes and adjacent space tissue. Managing patient with MMT is difficult and results of treatment remain poor.

MATERIAL AND METHODS

With the goal of identifying significant prognostic features we undertook a review of clinical and pathologic data of women of MMT treated at Gujarat Cancer and Research Institute between 1983 to 1996.

RESULTS

The patient's age at diagnosis range from 46 to 66 years with means of 59.2 years. All patients were postmenopausal and multiparous. Out of 7 patients 6 patients had hypertension in which 3 had ischaemic heart disease 2 patients had obesity and one had diabetes. No patient had received previous radiotherapy.

The most common chief complaint was abnormal vaginal bleeding which occurred in 6 patients except one with ovarian tumour who had abdominal lump and pain. All patients underwent initial surgery in the form of total abdominal hysterectomy or radical abdominal hysterectomy. FIGO surgico-pathologic staging was ranging from I to IV. Two patients had middle one third myometrial invasion

and remaining three patients of uterine MMT and one patient of cervical MMT had full thickness involvement of muscles. Two patients had heterologus MMT while 5 patients had homologous MMT. Three patients received adjuvant radiotherapy as well as chemotherapy while two patients received only radiotherapy. One patient with ovarian tumour is on chemotherapy at present. Out of 7 patients 2 patients had stage IV and both died of disease at 3 and 11 months after diagnosis. Two had stage III disease and they are taking adjuvant treatment after surgery (follow up period 6 and 7 months). Two patients had stage II tumour one of with cervical MMT died of disease at 19 months and with other uterine MMT is free of disease at last follow up (19 months). One patient had stage I disease. She received RT and is free of disease at the last follow up (43 months).

DISCUSSION

The mean age of the patients in this series is 59.2 years which is similar to that reported in other studies (Macasae et al 1985, Masterson et al 1969, Rachmanioff et al 1966, Williamsons et al 1966). The advanced age of the patients in this series correlates with their post menopausal status and it is consistent with other reports, (Macasae et al 1985, Williamson et al 1966, Vellos et al 1963) that most MMT patients are post menopausal. No patient in this series was nulliparous, comparable to 11% reported by Macasae et al (1985), 12% reported by Chuang & Van Velden (1969) but significantly lower than the 50%

Table I
MALIGNANT MIXED MULLERIAN TUMOURS
(MMMT) - CLINOPATHOLOGIC RESULT

S. No	Age	Comp.	M/H	Med. Di	Surgery	Site	Hpe	Stage	Adj. Treat	Survival in months
1	66	PMB,DIS	MENO	IHD,HT	TAH+BSO	UTERUS	MMMT HO	I	RT	NED (43)
2	60	PMB, DIS	MENO	HT	TAH+BSO +OM	UTERUS	MMMT HO	II	RT+CT	NED (19)
3	58	PMB,	MENO	-	TAH+BSO	UTERUS	MMMT HO	IV	RT+CT VAC-3	DOD (7)
4	65	PMB,DIS	MENO	IHD,HT	RAH HYST	UTERUS	MMMT I HT	II	RT+CT	NED (7)
5	70	PMB, DIS	MENO	HT, DIA	TAH+BSO	UTERUS	MMMT HO	IV	-	DOD (3)
6	50	PMB	MENO	HT	RAH HYST	CERVIX	MMMT HO	II	RT+CT VBP-3	DOD (19)
7	73	PAIN LUMP	MENO	IHD HT	TAH+BSO +OM	OVARY	MMMT HT	III	CT CAP	NED (6)

TAH = Total abdominal hysterectomy
 BSO = Bilateral salpingo oophorectomy
 RAH = Radical hyst = Hysterectomy
 CT = Chemotherapy
 RT = Radiotherapy

NED = No evidence of disease
 DOD = Died of disease
 MENO = Menopause
 OM = Omentectomy

recorded by Bartisich & Laary (1967), 40% reported by Masterson et al (1969).

The constitutional factors associated with endometrial carcinoma were found in comparable proportions in this schedule. (2/7) obesity (7/7) diabetes (6/7) hypertensive which is comparable to Macasaet et al (1985), Morris et al (1966), Rachmaninoff et al (1966). None of our patients had received previous radiotherapy. Sternberg et al (1954) Carter & Macdonald (1960) found no previous history of pelvic irradiation in their series.

As with endometrial carcinoma postmenopausal bleeding was the commonest chief complaint in all patients (uterine and cervical MMMT) and patients with ovarian MMMT had swellings and pain in abdomen. Out of six patients of uterine and cervical MMMT, it was possible to diagnose lesion in 4 patients by D&C or biopsy. Two patients had showed malignancy but definitive diagnosis and MMMT was established only on examination of extirpated uterus. In ovarian MMMT also diagnosis was made after surgical removal of tumour by laparotomy.

FIGO pathological staging system was successful in predicting outcome. Table I shows that FIGO pathological stage I patient is free of disease with duration of follow up 43 months. One stage II patient is free of disease and other died of disease. It is early to say for stage III patients because they have passed only 6 and 7 months after surgery. Both stage IV patients died of disease in spite of treatment within a year. According to Macasaet et

al (1985) pathologic staging system was successful in predicting outcome, patient with stage I & II had significant better outcome than with stage III & IV. Two patients with uterine MMMT had middle one third myometrial invasion and free of disease (followup period 43% 19 months). Four patients had full thickness involvement out of which 3 died of disease and for one patient it is early to say outcome due to shorter follow-up period. Macasaet et al (1985) also observed that patients with deep myometrial invasion had poor outcome.

CONCLUSION

This study shows that primary surgical approach is essential to delineate the extent of disease prior to treatment and extent of disease is predictor of outcome.

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