DYSGERMINOMA OF OVARY

(A Report of 4 Cases: One Associated with Pregnancy)

by

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SUMMARY

Four cases of dysgerminoma of ovary are discussed out of which one was associated with pregnancy.

Dysgerminoma of the ovary is a group of germ cell tumours of the ovary. It is a relatively malignant tumour which occurs in young women and was first labelled as Dysgerminoma by Mayer in 1931. The incidence has been described as 2.6 to 5% of all malignant ovarian tumours. In Japan the overall incidence appears to be higher i.e. 10% (Wilder and O'Leary, 1968).

Association of dysgerminoma and genital maldevelopment has been reported by several authors (Mayer, 1931; Wider and O'Leary, 1968), while in contrast to this tumour has been found in patients having normal sexual function (Pedowitz and Grayzel, 1951; Brody, 1961).

Association of dysgerminoma of ovary with pregnancy has been reported by several authors. Muller *et al* (1950) reported 11 cases associated with pregnancy. Misra (1958) reviewed the whole world literature on 544 cases of dysgerminoma and reported very few cases associated with pregnancy. Chakrabarty (1965), Kusum and Desa Souza (1968) also published 1 case of dysgerminoma of ovary with pregnancy.

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Observations

Clinico pathological features of 4 cases are shown in Table I. Follow up was possible in 2 cases only.

Case 1 survived for 5 years and case 2 died after 1 year due to metastases.

Discussion

Dysgerminoma of ovary usually occurs in the younger group of women. Highest incidence occurs in the IInd and IIIrd decade of life (Muller *et al* 1950). Most of the patients are nullipara. In the present series, 2 of the patients were unmarried aged 13 years while the other 2 were married with one child. 20% of the cases are asymptomatic (Wider and O'Leary, 1958). In our series, all the 4 patients came with history of lump in abdomen and pain. The tumour is usually unilateral but bilateral tumours have

TABLE I

Clinico-Pathological Features of Four Cases of Dysgerminoma

S. No.	Age in yrs.	Present symptoms	Macroscopic Features	Microscopic Features	Metastatsis if present	Uni/Bilateral	Treatment
1.	13	Unmarried, abdominal lump of 20 week, pain in abdomen. Ascites +	Lobulated ovarian mass, right side 6″ x 8″ left side 4″ x 6″ both encapsulated	Dysgerminoma	Nil	Bilateral	Hysterectomy with bilateral salpingo-oophorectomy
2.	13	Unmarried swelling firm of 24 weeks, pain in abdomen, Ascites+	Right side ovarian mass 9″ x 7″ cystic irregular mass with broken capsule, haemorrhagic fluid in peritoneum	Dysgerminoma	Abdominal right renal area after 6 months of treatment	Uni-bilateral	Hysterectomy with bilateral salpingo-oophorectomy
3.	18	Amen 9 month, primi swelling in right hypochondrium contracted pelvis	Encapsulated right ovarian grayish in colour 7″ x 8″. No Ascites present	Dysgerminoma	Nil	UL	Caesarean section; unilateral salpingo-oophorectomy
4.	22	Para 1, abdominal mass with pain Ascites +	Encapsulated right ovarian mass 8″ x 9″ left ovarian mass 7″ x 8″	Dysgerminoma	Nil	BL	Hysterectomy with bilateral salpingo-oophorectomy

been found in 14.8% of cases (Muller *et al* 1950). Right sided tumours are more common than left sided tumours. In this series, bilateral tumours were found in 2 and unilateral in 2 patients. Cases of sexual maldevelopment have been reported with tumour (Mayer, 1931), but in the present series of 4 patients no sexual abnormality was found.

Pregnancy has been reported in conjunction with tumour, Muller *et al* (1950), Goyal *et al* (1979), Philips and Gurcharan Kaur (1963), Chakravarty (1965), Kusum and Desa Souza (1968). In the present series 1 case was associated with a full term pregnancy.

Five year survival rate varies from 27% to 75%, Muller *et al* reported 5 years survival rate of only 27.3% and Pedowitz 27.1% whereas Wider and O'Leary (1968) reported 60% in younger age group. Poor prognostic factors include, capsule not intact areas of haemorrhage, ascites, presence of teratoma or choriocarcinoma and an age less than 15 years or over 40 years.

Prognosis is better in unilateral tumour with intact Capsule. Survival being 89.79% with unilateral tumour, 29.4% with bilateral tumour and 25.3% with metastases. Because of the malignant potential of tumour, most of the authors believe that with the diagnosis of dysgerminoma total hystectomy with bilateral salphingo-oophorectomy followed by X-ray therapy is the treatment of choice.

If the patient is young, the tumour is encapsuled and confined to one ovary, conservative surgery may be done with a careful watch and follow up of the patient, Chowdhury *et al* (1983) and Mattur *et al* (1981).

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