PREGNANCY FOLLOWING REMOVAL OF GRANULOSA CELL TUMOUR OF OVARY WITH ABSENCE OF CONTRALATERAL OVARY

by

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Unilateral agenesis of ovary and fallopian tube is a known but rare congenital anomaly. Dysgenetic (streak) ovaries have a known predisposition for dysgerminoma and gonadoblastoma (Koller, 1966; Teter and Boczkowski, 1967); but to our knowledge, there has been no case on record, where there has been granulosa cell tumour of one ovary with absence of the contralateral ovary and tube, an association encountered in a young patient at Medical College Hospital, Rohtak, Haryana. The other point of interest in this patient is that only enucleation of granulosa cell tumour was carried out and this was rewarded by repeated pregnancies. She is alive and well without any evidence of recurrence of the tumour 7½ years after initial surgery.

CASE REPORT

Mrs. S. 25 years Pl + O was admitted for the first time on July 6th, 1971 with irregular bleeding per vaginum off and on for 4½ months preceded by amenorrhoea for 40 days. Bleeding varied from slight to excessive lasting for 3-4 days with intervening periods of 3-4 days. She had regular cycles 3-4/30 days till 6 months ago. She had I full term normal delivery in 1967 and male baby born died 3 years later.

On examination, she looked pale. Only positive finding was a solid mass 3″ x 4″ in size mobile non-tender felt through left fernix on pelvic examination. Routine laboratory investigations—blood hemogram urine analysis, blood sugar, urea and skiagram of the chest were essentially normal. Endometrium obtained on curettage was in proliferative phase.

At laparotomy, there was a solid mas 4″ x 3″ arising from left ovary and left tube was normal. Right ovary and tube could not be found anywhere including vicinity of broad ligament and inguinal canal neither there was any fibrous band to represent right ovary. Uterus was normal in size but right cornu was not well developed and was somewhat rounded. Enucleation of the encapsulated tumour was done and left ovary was reconstructed.

Postoperative period was uneventful except for severe blood transfusion reaction in the immediate postoperative phase for which she needed extensive recussitation. Histopathology of the tumour was consistent with granulosa cell tumour. Patient did not agree for any further therapy and was discharged on August 9, 1971 in good condition. Follow up at 1, 4 and 8 months postoperatively revealed no evidence of secondaries.

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Specimen

Gross: Lobulated encapsulated tumour mass measured 10 x 8 x 5 cms and weighed 152 gms. The cut surface of the tumour was mainly solid but showed small cystic areas also. The solid portions of the tumour were granular, trabeculated and showed large areas of yellowish hue separated by greyish brown areas. Dark brown areas of haemorrhage were also seen.

Microscopic: The tumour showed a variable microscopic pattern in different areas. There were areas showing folliculoid pattern with numerous Call-exner bodies, cystic spaces of variable sizes with surrounding rosette like arrangement of cells, sheets of tumour cells and at other places formation of glands (pseudoadenomatous pattern). These groups of tumour cells were separated by fibrous septa of variable thickness (Figs. 1 & 2).

She was lost to follow up for nearly 4 years, during which period she had 2 premature deliveries of 28 weeks each. She reported on June 10, 1975 with amenorrhoea for 6½ months and discharge per vaginum for 4 days. On examination, she was in good condition. Pulse 84/min. B.P. 110/70 mm Hg. Oedema feet nil. Pallor present. Abdominal findings were consistent with 28 weeks pregnancy. There were no nodules in the pouch of Douglas. X-ray chest was normal. Other investigations STS, blood sugar, urea, hemagglutina test for toxoplasmosis were essentially within normal limits.

Patient was kept in hospital till term when on August 28th, 1975, she had full term normal delivery resulting in the birth of an alive female baby weighing 6 lbs. without any congenital anomalies. Mother and baby were discharged in good condition on september 4, 1975.

Patient was readmitted in October, 1978 with 38 weeks pregnancy and she had normal delivery on 13th Nov. 1978 that resulted in the birth of 3.3 kgs alive female baby without anomalies. She was discharged on 20th Nov., 1978 with no evidence of recurrence of tumour 7¼ years after initial surgery.

Comment

Granulosa cell tumours are infrequent but interesting tumours and constitute 3 per cent of all ovarian tumours and 9% of primary ovarian carcinoma (Morris and Scully, 1958). Granulosa cell tumours are unilateral in majority of cases, being bilateral in 2.93 per cent cases (Novak *et al*, 1971). Rarely these are associated with pregnancy. Upto 1966, only 20 such cases have been reported (Gillibrand, 1966). Novak *et al* (1971) in a study of 307 granulosa cell tumours, found 13 were associated with pregnancy. Talerman *et al* (1975) could find only 4 more cases in literature and added 1 case of their own. However, there are very few case reports of pregnancy following salpingo-oophorectomy for granulosa cell tumour (Mitra, 1940; Powel and Black, 1942; Tweeddale *et al*, 1955; Creasman *et al*, 1971), although there must be more cases (not reported) as in young women with encapsulated granulosa cell tumour, salpingo-oophorectomy is carried out. To our knowledge, there are no case reports of successful pregnancy following enucleation of granulosa cell tumours from a single existing ovary with absence of the other ovary and fallopian tube as encountered in the present case and fortunately our patient is alive and free from recurrence although only enucleation of this potentially malignant granulosa cell tumour has been carried out 7¼ years earlier.

Summary

A case of granuloma cell tumour of the left ovary with absence of right ovary and tube is reported. After removal of the tumour, patient had 4 pregnancies, two of which resulted in the birth of liveborn normal female babies. Patient is alive and free from recurrence 7¼ years after initial surgery.

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See Figs on Art Paper V