ENDODERMAL SINUS TUMOUR (YOLK SAC TUMOUR)

(A Case Report with Review of Literature)

by

V. R. AMBIYE
(MRS.) C. M. ALWANI
RAKESH SINHA
and
(MRS.) ASHA DALAL

SUMMARY

A case of endodermal sinus tumor is presented. The literature regarding clinicopathological aspects is reviewed. The diagnostic, prognostic, and therapeutic aspects especially conservative versus radical therapy and radiotherapy versus chemotherapy are discussed.

CASE REPORT

With a view of its rarity a case report of a endodermal sinus tumor is presented here. The case was studied clinicopathologically and for alphofetoproteins in the serum. This tumor was amongst cases of ovarian tumors over past 10 years constituting an incidence of 0.29% of all ovarian tumors and 1.25% of malignant ovarian tumors.

A young unmarried woman of 18 years of age was admitted in the medicine ward 15-12-82 for abdominal pain, fever with chills and rigors, and distension of abdomen.

On examination she was in a good condition, average built, secondary sexual charactors well developed. Abdominal examination revealed a firm mass about 20 weeks gestation (7" x 5") arising from the pelvis. The surface was smooth though consistency was variable. There was no evidence of free fluid. On rectal examination the mass was felt on the right lateral side merging with the right border of the uterus.

From: Department of Obstetrics and Gynaecology, B.Y.L. Nair Charitable Hospital and T.N. Medical College, Bombay-400 008.

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Investigations:

Hb 5 g.%, T.C. 29600/cmm. D.C. P_{80} L_{11}, Blood group B +ve, BUN 14 mg.%, Blood Sugar fasting 90 mg.%, Postprandial 130 mg.%, Serum creatinine 0.85 mg.%, Ultra sound revealed tumor arising from pelvis, plain x-ray was normal. A test for alpha feto protein in the serum was positive. Patient was explored on 18-12-82. A fungating growth 7" x 6" was found extending throughout the pelvis arising from right ovary. The fallopian tube on right side, posterior parietal peritoneum and uterine wall were involved. The omentum and antimesenteric border of intestines were involved. Even anterior abdominal wall and lateral wall of the pelvis were involved. The under surface of liver, spleen were normal. The left ovary was normal and was not involved on bisection and frozen section. Total abdominal hysterectomy with right salpingo-oophorectomy and left salpingectomy was performed. The debulking of the tumor with removal of most of the growth was performed. The omentectomy was also performed.

Post-operatively patient was given higher antibiotics and cyclophosphamide injection intravenously 200 mg./day x 2 and 100 mg./m^2/day

x 3 days alongwith serial monitoring of haemogram.

From 12th day onwards patient was started on VAC therapy viz.

— I.V. Vincristine 1.5 mg./m^2/day x 5
— I.V. Actinomycin D 0.5 mg/m^2/day x 5
— I.V. Cyclophosphamide 100 mg./m^2/day x 5

Serum Alpha fetoprotein were absent 8th day on but reappeared on 20th day of hospital stay indicating recurrance of the tumor.

The patient started getting worse from 24th day onwards, the abdominal distension reappeared and died due to cardio-respiratory failure on 28th day. The postmortem showed extensive growths on lateral pelvic walls and on the anterior abdominal wall and mesentery of intensines.

Pathological Examination:

Gross: Tumor 7″ x 6″ x 3″ uncapsulated.
Weight: 500 gms.

Cut surface fleshy, haemorrhagic and necrotic areas in the tumor.

Histology:

H & E stain examination showed microcystic vacuolated network. Pevivascular formations seen. Areas of haemorrhage and necrosis were seen, P.A.S. positive areas seen in the alveolar spaces.

The serum alpha feto proteins were done by double diffusion technique. It showed line of precipitation with monospecific antisera.