

# OVARIAN CARCINOMA IN ADOLESCENTS

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*Summary:* The Authors describe a case of FIGO IA well differentiated mucinous adenocarcinoma of the ovary which was treated by adnexectomy. Six year follow-up showed the patient to be free of pathology.

*Key words:* adolescents, tumors, carcinoma, ovary.

## INTRODUCTION

Huffman et al (6) report that out of 2567 ovarian tumors described between 1963 and 1975, 593 were not neoplastic and 1974 were neoplastic; among these 61.63 were germinal cell tumors and 11.87% were tumors of the coelomic epithelium, of which 63.7% were malignant. In 1972 Jensen (5) reported that of 67 epithelial tumors in patients under the age of 20, cystadenoma was the most frequent tumor.

In our Institute the frequency of pelvic tumors in patients under 18 years of age was 0.13% of gynecological admissions between 1965 and 1985 (4). Ovarian tumors prevailed, (75%; 22 cases), followed by paraovarian tumors (17.86; 5 cases), and uterine tumors (7.24%; 2 cases). The ovarian tumors were prevalently benign (18 cases), consisting of cystadenoma (9 cases) and dermoid cysts (8 cases). In this series two cases of ovarian dysgerminoma and one case of ovarian carcinoma were present.

The Authors aim to study a case of ovarian adenocarcinoma due to the rarity of this pathology in adolescents.

## CASE REPORT

Patient S.G., para 0, gravida 0, age 14. Menarchè at 13 years of age with subsequent normal menstruations. Menstrual flux occurred 2

days before admission. Patient referred that she felt an increase in abdominal volume and pain at the right iliac fossa radiating to all abdominal quadrants. In the last four hours the pain had increased and was accompanied by nausea and episodes of vomit. Patients' general condition was good and psychophysical development was normal. Rectal exam showed a retroverse uterus of normal volume, located on the left. On the right of the uterus there was a palpable, and painful tumor with fundus extending 23 centimeters above the pubic symphysis. Echography demonstrated a dishomogenous formation of prevalently solid aspect with a maximum diameter of approximately 12 centimeters. The controlateral adnexi and the uterus were normal. There was non ascites. Blood chemistry was normal.

On longitudinal xyphopubic laparotomy the abdominal cavity was occupied by a solid, grey, smooth, tumor of the dimensions of a fetal head at term, that originated from the right adnexa which was rotated twice on the peduncle. The uterus and the left adnexa were normal. Washing of the peritoneal cavity and scraping of the parieto-colic plane and Douglas cavity were performed. Right adnexectomy was performed. Subsequent inspection and palpation of abdominal organs did not show pathology; pelvic lymph nodes and iliac aorta were normal on palpation. Frozen section on histologic exam revealed a well differentiated mucinous adenocarcinoma. Procedure was completed with asportation of a cyst of the appendicular mesentery, appendectomy, and anexectomy.

On dissection the asported specimen was prevalently solid with tissue of hard consistency. Internally there were small cystic formations with mucin content. The weight of the mass was 4 kilograms. The appendix and mesenteric cysts were macroscopically normal.

The histologic exam showed the ovarian tumor to be a well differentiated, mucinous ovarian adenocarcinoma; no notable pathology was found on the other asported specimens; there were no neoplastic cells in the peritoneal wash fluid or in the scraping of the parieto-colic plane and Douglas cavity.

Postoperative course was normal and 6 year follow-up showed patient to be free of illness.

## DISCUSSION AND CONCLUSIONS

Gynecology of infancy and adolescence has developed notably in recent years. In our Institute, between 1970 and 1984 the frequency of admissions of women under 18 years of age was 1.83% (154 cases of 8381 admissions). The main indication for admission was dysfunctional metorrhagia (57.60%; 89 cases) followed by pelvic tumor (16.47%; 28 cases)<sup>(3)</sup>. The ovarian tumor in most cases was a cystadenoma. In the cases of FIGO IA dysgerminoma conservative treatment consisting of monolateral adnexectomy was enacted due to the young age and possibility of accurate follow-up of the patient. Frozen section was extremely useful in these cases. In patients who underwent this type of treatment the survival rate was equal to those treated with hysterectomy and adnexectomy<sup>(7)</sup>. It is possible even in cases of FIGO IA well-differen-

tiated adenocarcinoma to effect this type of treatment. We treated 2 cases of dysgerminoma and one case of ovarian adenocarcinoma in this manner and there was no recurrence 5 and 6 years respectively after surgery<sup>(4)</sup>. Diagnosis in cases of pelvic tumor is often late and usually when the ovarian tumor has already achieved notable dimensions and is palpable by the patient as in cases described.

The development of infant and adolescent gynecological out-patient clinics as well as better health education should help to resolve this problem.

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