A 20 years experience on granulosa cell tumour

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Background: The prognostic factors and the recurrent nature of granulosa a cell tumor is unclear. Chemotherapy has a compelling role in locally advanced cases, inoperable cases, and metastatic cases. This retrospective study results elucidate the need for chemotherapy in advanced cases which then translates to a better overall survival benefit, increased disease-free survival and delay in progression. The prognostic factors and the recurrent nature of granulosa a cell tumor are unclear and unpredictable added to the fact that these tumors are rare and have an indolent course. There is only a scarce data on the optimum treatment for this group of patient. The aim of this study was to pursue the clinicopathological features and prognostic factors for the recurrence patterns and the optimal management of these cases.

Materials and Methods: This is a descriptive study with secondary data from records. A retrospective multi-institutional review of patients with GCTs of the ovary treated or referred was analyzed. The surgical outcome, pathological details, chemotherapy details, follow-up details, relapse pattern and the treatment of the relapsed disease were analyzed. Kaplan-Meier survival analysis was used to determine the prognostic and predictive markers for survival.

Results: This is an analysis of the survival rate and the treatment results of granulosa a cell tumor between 1995 and 2015 over a period of 20 years. We have analyzed the results of 126 patients, of which 53 patients (42%) were premenopausal and 73 patients (58%) were postmenopausal. Out of the 126 patients, 84 patients had complete surgical staging which constitutes transabdominal hysterectomy and bilateral salpingo-oophorectomy and a staging laparotomy, 35 patients had incomplete or suboptimal surgery, 7 patients had fertility sparing operation. The 67 patients who had complete surgery and early-stage disease with no risk factors were on observation. These patients have not had a relapse. A dataset of 34 relapsed granulosa cell tumor patients was analyzed. Out of these, 19 patients have survived cancer. Out of 34 cases, 10 patients had complete surgery and 15 patients had incomplete surgery including fertility-preserving surgery. Kaplan-Meier survival analysis results show that cancer was cured by complete surgery followed in chemotherapy wherever high-risk factors were present, whereas the survival rate drastically declined in the cases of incomplete surgery without adjuvant chemotherapy. For patient's stage of cancer size of a tumor, type of surgery done, tumor spill, histopathology and chemotherapy in positive high-risk parameters have relatively more effect on survival chance.

Conclusion: Granulosa cell tumors are known for their rarity. Chemotherapy has a compelling role in locally advanced cases, inoperable cases, metastatic cases, in cases with tumor spill or rupture, certain histopathological variants (such as juvenile granulosa cell tumor, yolk sac tumor) and tumors >9cm. Other factors which do contribute to the prognosis would be the age at diagnosis, nuclear atypia, mitotic index, surgical method and presence of residual disease after initial surgery

Biography

Priya Jovita Martin received her MBBS in the year 2003 and pursued her super specialization in the field of Oncology. She holds dual specialization in the fields of Radiation Oncology and Medical Oncology. She holds a Doctor of Medicine in Radiation Oncology and Doctorate of Medicine degree in Medical Oncology. She is also a diplomat of national board in Radiotherapy. She has a collective experience of 15 years in the field of Oncology and Palliative Care. She is also an alumnus of the New Castle University, United Kingdom, where she pursued her Masters of Science in Oncology and Palliative care. She has published extensively on various national and international journals on the topics- Uterine c-kit positive sarcoma, Extranodal Testicular Anaplastic Versus Plasmablastic Plasma Cell Tumor, Malignant Pediatric Gliosarcoma, Bone Lymphoma when treated with Targeted Therapy and the role of an all-oral chemotherapy containing Capecitabine and Etoposide in advanced, progressive metastatic disease. She currently works as an Assistant Professor of Medical Oncology in Sri Ramachandra Medical Center, a leading quaternary care multi-specialty hospital and medical Centre located in Chennai, India.

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