CA125 and histological type of ovary cancer

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Introduction: Ovarian tumors are ranked 6th in women's neoplasia in Algeria. Epithelial carcinomas represent 2/3 of ovarian tumors. The serous type is the most frequent. The other types are: mucinous, endometrioid, clear cell, transitional cells, mixed epithelial and undifferentiated. The remaining 1/3 is represented by malignant germinal tumors (dysgerminoma, vitelline tumor) and those of the sexual cords and stroma (granulosa tumor). The CA 125 assay provides information on the efficiency of treatment of ovarian cancer and on the occurrence of recurrence.

Aim: A retrospective and prospective study was conducted to find the correlation between the level of CA 125 and the histological type of ovarian cancer.

Materials & Methods: We report a series of 40 patients treated for ovarian cancer in the medical oncology department of the Pierre and Marie Curie Center (Algiers) during the period from January 2015 - January 2017. The CA 125 assay was carried out in all these patients: before any treatment, then after the surgery and then during the chemotherapy. The norm of CA 125 in our laboratory is < 35 IU/ml.

Results & Discussion: Results of the study revealed that the serous type is the most frequent with 57.5% (23 cases/40). The level of CA 125 in the serous type is the highest with mean: 1400 IU/ml (40 x the norm). The level of CA 125 in the mucinous and endometrioid types is normal (<35 IU/ml). However, two recurrences had a rate = 3 x the norm and the level of CA 125 in clear cell tumors had not exceeded 70 IU/ml (2xN). Mixed tumors and germline tumors showed normal CA 125 levels. The only case of immature granulosa cell tumor showed a high level of CA 125 110 IU/ml (3xN). This elevation corresponds to the presence of peritoneal carcinomas. The kinetic study of CA 125, during therapeutic follow-up showed a regular decrease in the level of CA 125 which reflects a good response to treatment.

Conclusion: Our study showed that serous tumors are the most frequent of ovarian cancers. They have the highest CA 125 levels. CA 125 appears to be a very sensitive and reliable marker for the therapeutic follow-up of this histological type. This retrospective study is continuing and a prospective study is on-going.

Biography
T Attouche has completed his PhD from Medical Faculty, Algeria, and completed his Post-doctoral studies from Department of Medical Oncology of “Pierre & Marie Curie Center” (Algiers) and Department of Medical Studies of “Université Libre de Bruxelles” (Belgium), also in CHU Ambroise Paré (Mons, Belgium). He is a member of the Algerian Society of Medical Oncology, member of European Society of Digestive Oncology. His main interest includes RMN impact in follow up of breast cancer, nutrition in oncology and endometrial cancer.

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