

## **Etiological Observations in 30 Women with Ovarian Cancer (OC)**

### **Introduction**

In 37 years of medical oncology practice (April 1, 1981 – March 31, 2018) 2'201 patients have been admitted. Besides medical oncology a main emphasis has been laid on clinical etiological observations. **Etiology** is defined as the science of causes (1).

Focussing on etiology has been triggered by Dr. Robert W. Miller, whom I (WW) have visited in May 1977. At that time Dr. Miller was head of the clinical epidemiology branch at the National Cancer Institute in Bethesda MD, USA.

Throughout his career he had called attention to the role of the alert clinician in causal research (2). His medical history questionnaire for cancer etiology (3) was then introduced in my office (WW). In addition sera have been obtained from 753 consenting patients in the years 1983 to 1991 and stored at minus 70 to 80 degrees Celsius. Most patients had no history of prior radio-or chemotherapy. DNA in these sera is now studied (4). The patients with stored sera are grouped into cohorts defined by their cancer diagnoses, ranging from one man with NK-cell-leukemia up to 152 women with breast cancer. All patients have visited my office during different time periods, ranging from one visit to many visits, often until death. Therefore the clinical information ranges from small to comprehensive data sets. For studies additional data search might become necessary in cancer registries, from patients and their relatives.

The ovaries have been of scientific interest to me (WW) since my dissertation showing that ovaries can normalize in the second cycle after discontinuation of ovulation inhibitors (5). In a cohort of 30 women with OC breast cancer was overrepresented among the female relatives and colorectal cancer among the male relatives (6).

## Materials and Methods

Patients. Sera have been stored from 30 women with ovarian cancer. Their median age at diagnosis was 61 years (range: 34y – 76y). Histology : 15 serous, 2 serous borderline, 7 mucinous, 3 endometrioid, 1 solid, 2 carcinosarcoma.

FIGOstage : IA : 3, IB : 1, IC : 1, IIA : 3, IIB : 2, IIC : 1, IIIA : 2, IIIB : 4, IIIC : 10, IV : 3

20 patients have died of ovarian cancer : median age at death: 67 years (range: 45y – 79y). 11 women survived 4 to 18 months, 9 survived 31 to 151 months.

10 patients have been lost to follow-up : median age at last follow-up: 60 years (range: 43 – 90y).

Sera. After oral consenting 10cc native venous blood have been drawn from each patient into a 10cc empty vacoutainer tube which was then centrifuged for 10 minutes in a large Hettich centrifuge at 5000 rounds per minute. The sera have then been stored at minus 70 to 80 degrees in 3 cryotubes per patient (2cc,NUNC,Gibko AG Basel/Switzerland).

## Results

### Genetics

*Personal History.* One of the 7 women with mucinous ovarian cancer had a XXX syndrome. In the literature there is one case of a women with XXX syndrome and a mucinous cystadenoma (7).

*Family History.* Family studies are a key to the understanding of the genetic and environmental etiology of chronic disease (8,9). In 21 (70%) of the 30 families there were one to three first degree relatives with cancer. In 7 families (23%) a female first degree relative had breast cancer and in 7 families (23%) a first degree relative had stomach cancer.

## References

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