The impact of hazardous drugs: The personal stories behind the statistics.

Ms. Georgina Angusto Zambrano

Conference: Women, Work and Cancer

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1971 Health Technical Assistant (ATS – Universidad de Barcelona)

1987 Nursery Graduate, (UNED)

1967- 2000 Nurse in Urology Hospital (Barcelona Reference Hospital)

Handling, preparation and administration of **Antineoplastic Medication**:

## **CYTOTOXICS:**

ONCOTIOTEPA (Alkylator) from 1968 to 1980

DOXORUBICINE (Adriamycin) (anticancer antibiotic) from 1980 to 1987

MITOMICYN C (Alkaloidal Antibiotic) from 1980 to 1988

## **BIOLOGICAL:**

INMUNOCYST BCG (Bacillus Calmette-Guerin) (Vaccine of tuberculosis, attenuated bacillus) from 1987 to 2000

I was neither informed nor trained regarding the danger of such CYTOTOXIC and BIOLOGICAL products

#### MY ILLNESS:

1999

September 1999, I was **diagnosed bladder cancer** with surgical intervention "Transurethral resection of bladder tumor". Biopsy with result: TRANSITIONAL CARCINOMA GRADE I (Ta)

In 1998 another colleague of my team at the Reference Hospital, that was performing the same manipulation and administration of such antineoplasic medication, during the same period of time, was dianosed bladder **cancer Grade IV**, Carcinoma in situ, should be operated surgically: "Total Cystectomy & External urinary breaker (Ileal bladder)". Currently deceased by such cancer.

#### MY INVESTIGATION AND RESEARCH:

1999

The coincidence of both bladder cancers made me think that we had come down with those Cancers. I started my investigation on the manipulation of Antineoplastic drugs:

- Generalitat de Catalunya, Departament de Sanitat i Seguretat Social, 1987. "Recomenacions per a la manipulació de medicaments citostàtics i l'eliminació dels seus residus"
- OSHA, Office of Occupational Medicine, 1986. "Work Practice Guidelines for personnel Dealing with Cytotoxic (antineoplastic) Drugs".

NONE OF THIS RECOMMENDATIONS HAD BEEN IMPLEMENTED IN THE HOSPITAL WHERE I WORKED

#### **RESEARCH:**

- Facultad de Medicina de Barcelona, various publications: Cancerlit, Lancet, Cancer Nursing
- Journal of the National Cancer Institute, 1993 where a 39-years-old Female Pharmacist, after twelve years dealing with antineoplastic drugs (Doxorubicina), got down with **bladder cancer grade II.**."

I reported to the Hospital the correlation between the bladder cancer and handling the medication. The Hospital refused such correlation .

I contacted with a specialized lawyer firm to defend my rights.

I was myself forced to continue my investigation and research tasks.

- UNIDAD DE TOXICOLOGIA DEL HOSPITAL CLINICO DE BARCELONA, "Clinical report of the patient Georgina Angusto Zambrano of evaluation of the toxic occupational risk to Cytostatic and of the realationship cause-effect, between bladder cancer Development and the cronic exposure to certain cytostatics"
  - Tiotepa, Mitomycin and Doxorubicin are TERATOGENIC products. (Spontaneous abortions and congenital maformations in pregnant nurses (INT Uro Nephrol 1996, Clinical Farmacology March 1989, Br Urology 1990(
  - Tiotepa, Mitomycin and Doxorubicin are MUTAGENIC products. (DNA Alteration) (Falk K, Roth S, Bonnie Rogers)
  - Tiotepa, Mitomycin and Doxorubicin are CANCERY products. (Lancet, and others)

### MUTAGENESIS IS THE FIRST STEP TO CARCINOGENESIS

I WAS NEVER PRACTICED URINE CONTROLS TO MUTAGENIC CHANGES.

1978 I had a spontaneous **Abortion** 

I developped an Autoinmmune illness, rheumatoid arthritis of unknown origin. Positive tuberculin test

Mantoux+++. Rifinach treatment ( 3 months) to prescribe biological treatment until nowadays. ( Joan Games in

1996 warned of this biohazardous medication).

# Thank You!