

# Age-Related Cognitive Impairment in Cancer Patients Receiving First-Line Chemotherapy

# Giulia Canonico\*

Department of Medical Oncology, Centre François Baclesse, Caen, France

# INTRODUCTION

Cognitive impairment brought on by chemotherapy is more likely to affect older cancer patients. During first-line chemotherapy, we prospectively assessed cognitive impairment and its risk variables in older cancer patients. The Mini-Mental State Examination was used to assess cognitive function, with results for age and sociocultural level being modified. The Geriatric Depression Scale, the Instrumental Activities in Daily Life Mini-Nutritional Assessment, and other multidimensional geriatric assessments were conducted before and throughout treatment. The European Organization for Research and Treatment of Cancer Questionnaire was used to assess quality of life. A total of 2 assessments, including one at baseline, were performed on the patients that were included. 86 of these individuals initially displayed abnormally abnormally abnormal depression symptoms. In 58 individuals during treatment, impairment was seen. According to these findings, malnutrition and pre-existing cognitive impairment are risk factors for cognitive deterioration after chemotherapy in older cancer patients. Before beginning chemotherapy, this population's detection and treatment of these risk factors should be routinely taken into account

# DISCRIPTION

With a projected million new cases of cancer in Europe in the prevalence of the disease is rising. Globally, the incidence of cancer is increasing due to population ageing older persons are expected to make up about of all new cancer cases. Chemo brain, often referred to as chemotherapy-related cognitive impairment, affects a variety of cognitive functions that can have an influence on everyday functioning, quality of life, adherence to treatment, and decision-making. Around of cancer patients are affected by it, and approximately of cancer patients report cognitive problems during or after chemotherapy. This is significant for elderly individuals since ageing in itself is related with cognitive changes and functional decrease Although research on cognition in cancer patients is still in its infancy, Older individuals have not been extensively examined, despite the fact that cognition in cancer patients is a developing field of study. In fact, only few studiesalways with a very small sample size-have examined cognitive damage following chemotherapy. More than half of aged cancer patients treated for solid or haematological diseases had pre-frailty or frailty, which was associated with a higher risk of chemotherapy toxicity, according to a thorough evaluation of the literature. Sadly, we lack information on how cancer and its therapies affect the older population, who are frequently underrepresented in clinical trials because of their advanced age, particularly in terms of cognitive problems. Certainly, the average age of the patients participating in the treatment studies in oncology [1].

Baseline data on patients' ages, genders, and clinical traits as well as their multidimensional geriatric assessment scores were examined. Additional univariate and multivariate logistic regression models were conducted to determine the odds ratios of impaired MMSE and associated 95% confidence intervals. Regression models were created using a proven methodology. For each covariate, we conducted univariate regressions, and we included those that were significant at the level in the multivariate model (the full model). Covariates were eliminated from the entire model using Wald statistics if they were no longer significant. To assess the quality of fit between the entire model and the simplified model, log likelihood tests were run. Age, gender, living alone, performance status, tumour location (hematologic, digestive, lung, urogynecologic and disease extension were among the factors [2].

This experiment involved patients for Southwest French institutions between December and December 2005. Patients were sought out by the departments of oncology and gerontology at community hospitals and two cancer referral institutions. Twelve patients were missing the baseline examination, and the remaining valued and qualified patients did not get a second evaluation over time. Table provides baseline demographic and clinical information. participants were male and married, and the median age was. The majority of solid tumours at the tumour site, which was mostly the digestive system and NHL, had confined illness. About half of the patients received the recommended care [3].

This large multicentre cohort study examined MMSE deterioration following chemotherapy and its prognostic characteristics in older cancer patients 70 receiving first-line chemotherapy. Several studies, typically using a relatively

Correspondence to: Giulia Canonico, Department of Medical Oncology, Centre François Baclesse, Caen, France; E-mail: canonicogiulia43@surgery.edu

**Received:** 02-December-2022, Manuscript No. jggr-23-20015; **Editor assigned:** 05-December -2022, Pre QC No. P-20015; **Reviewed:** 17-December-2022, QC No. Q-20015; **Revised:** 22-December-2022, Manuscript No. R-20015; **Published:** 29-December-2022, DOI: 10.35248/2167-7182.2022.11.648

Citation: Canonico G (2022) Age-Related Cognitive Impairment in Cancer Patients Receiving First-Line Chemotherapy. J Gerontol Geriatr Res. 11: 648.

**Copyright:** © 2022 Canonico G. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

#### Canonico G

small sample size, have examined cognitive damage caused by chemotherapy in elderly people. According to our understanding, this research is the biggest one that has ever been done on patients who have been examined for impairment. Cognitive impairment following chemotherapy was substantially correlated with baseline cognitive impairment and malnutrition another important indicator of impairment was pain is a typical side effect of chemotherapy that can affect treatment compliance, lower quality of life, and cause long-term cognitive deficits. In contrast to conventional chemo, pre-existing cognitive impairment in our patients seems to be a risk factor for cognitive deterioratithe relationships between the dynamics of the immunised population and the frequency of searches for vaccines. This is the first thorough study of its kind in Poland to examine Google Trends data alongside epidemiological data in relation to additionally, the study shows how Poland's epidemiological data changed over the course of the investigation. We did not analyse the correlation between the variants and the epidemiological data, which is one known limitation of our study. The authors believe that this is a new area of research that should be considered in the future [4,5].

## CONCLUSION

Elderly people are more susceptible to the side effects of chemotherapy, particularly to this is troublesome since there are older cancer patients and older cancer patients who have extended survival rates. According to our research, malnutrition and preexisting cognitive impairment are independent risk factors for cognitive deterioration caused by chemotherapy in older cancer patients. Before starting chemotherapy, this cohort should be required to have these risk factors identified and managed with a systematic Method to aid in decision-making. It is important to properly manage pain symptoms as well.

## ACKNOWLEDGEMENT

None.

## CONFLICT OF INTEREST

None.

### REFERENCES

- Taherkhani A. A. Chronic kidney disease: A review of proteomic and metabolomic approaches to membranous glomerulonephritis, focal segmental glomerulosclerosis, and IgA nephropathy biomarkers. Proteome Sci.2019;17:1-8.
- 2. Bulow RD. Extracellular matrix in kidney fibrosis: More than just a scaffold. J Histochem Cytochem.2019; 67; 643-61.
- 3. Baker-SC. Diagnosis, evaluation, and management of high blood pressure in children and adolescents. Pediatrics. 2018;1;142-143.
- Oparil, S. New approaches in the treatment of hypertension. Circ. Res. 2015;116; 1074–1095.
- Mills KT. Global disparities of hypertension prevalence and control: a systematic analysis of population-based studies from 90 countries. Circulation. 2016; 134; 441-450.