

DOCTORAL CANDIDATE: Olesya Solheim
DEGREE: Philosophiae doctor
FACULTY: Faculty of Medicine
DEPARTMENT: Institute of Clinical Medicine
AREA OF EXPERTICE: "Medicine"

Professor Sophie D Fosså
Professor Claes G Trope

SUPERVISORS: Erik Rokkones
Janne Kærn
Erik Rokkones

DATE OF DISPUTATION: 19. August 2015

DISSERTATION TITLE: *"Malignant Ovarian Germ Cell Tumors: Survival and Long Term Adverse Effects"*

The overall objective of this thesis was to expand the current knowledge on survival, prognostic factors, and long-term toxicity among survivors after treatment for malignant ovarian germ cell tumor (MOGCT) with an emphasis on modern treatment with cisplatin-based chemotherapy, which became available in the late 1970s.

MOGCTs are rare but aggressive tumors which are typically diagnosed in teenagers and women in their twenties. After the the introduction of cisplatin-based chemotherapy to the treatment of MOGCT the majority of MOGCT patients are cured with a life expectancy similar to age-matched controls. .Therefore, long-term adverse effects , including reventually reduced fertility represent important issues for these young women.

Olesya Solheim and her colleagues have shown that most young women with MOGCT treated according to modern therapeutic principles, including fertility-sparing surgery and cisplatin-based chemotherapy, survive the disease with almost undiminished reproductive capacity.

Increased attention should be directed toward the management of older MOGCT patients and those with non-dysgerminoma histology with low socioeconomic status to ensure optimal treatment outcomes. Radiotherapy, as often used before 1980, should be avoided as much as possible when treating MOGCT patients to prevent the development of a second cancer.

Treatment of MOGCT patients with metastatic disease should be centralized to large cancer centers. In long-term MOGCT survivors treated with high doses of cisplatin-based chemotherapy clinicians should be aware of a possibly increased risk of cardiovascular disease .