

## Abstract

This bachelor thesis focuses on male infertility in a connection to testicular cancer. Testicular cancer is the most common malignancy among young men in a reproductive age and the worldwide incidence of testicular cancer is on the rise. A lot of attention is also given to an increasing rate of infertility in a context of testicular cancer. For these reasons, the aim of this thesis is to clarify several non-physiological changes, such as hormone levels, spermatogenesis and sperm parameters, which take place in a male body and influence the chance to become a biological father. These pathological changes can be due to the disease itself but also due to the treatment. A cryopreservation of semen is also going to be discussed as the way to preserve male fertility and as an option for couples with the infertility problems due to male factor which rely on help of the assisted reproduction.

Key words: testicular cancer, cancer treatment, male infertility, sperm parameters, mitochondria, assisted reproduction