TWENTY YEARS OF EXPERIENCE WITH LESS RADICAL FERTILITY-SPARING SURGERY IN EARLY-STAGE CERVICAL CANCER: PREGNANCY OUTCOMES

Introduction/Background The standard procedure in cervical cancer is radical hysterectomy (RH) and pelvic lymphadenectomy (PLND). Because of the increasing age of women at childbirth, fertility becomes a major challenge. We present pregnancy results after less radical fertility-sparing surgery in women with IA1, LVI positive, IA2 and IB1 (<2 cm, infiltration less than half of stromal invasions).

Methodology Laparoscopic sentinel lymph node mapping (SLNM) with frozen section (FS) followed by PLND and ‘selective parametrectomy’ (removal of afferent lymphatic channels from the paracervix) in case of a negative result was performed in all women. If lymph nodes verified negative by definitive histopathology, patients were treated by simple tractectomy (IB1) or large cone (IA1/IA2) biopsy 1 week after primary surgery.

Results From 1999 to 2018, 91 women were enrolled in the study (median age 29.1 years, range 21–40). In 76(83.5%) fertility was spared, 13 (17.1%) of them don’t want to be pregnant and 63 (82.9%) wished pregnancy. 54 from 63 women conceived (pregnancy rate 85.7%) and 48 from 63 women delivered 58 babies (delivery rate 76.2%). 39 women delivered in term (67.2%), 13 women between 32 and 36+6 weeks of pregnancy, 3 between 28 and 31+6 weeks and 3 between 24 and 27+6 weeks. Only one woman still plan pregnancy. One woman between 28 and 31+6 weeks. One woman is currently pregnant.

Conclusion Goal of fertility-sparing surgery is not only good oncological results, but also good pregnancy results. Pregnancy results after less radical fertility-sparing procedure seems to be very good (pregnancy rate 82.9% and delivery rate 76.2%). This work is supported by Cooperatio program 207035, Maternal and Childhood Care, 3rd Faculty Medicine, Charles University.

OVARIAN STEM CELLS FROM CRYOPRESERVED OVARIAN CORTEX: A POTENTIAL FOR NEO-OOGENESIS IN WOMEN WITH CANCER-TREATMENT RELATED INFERTILITY

Introduction/Background Cancer treatment related-infertility (CTRI) affects more than one third of young women undergoing anti-cancer protocols, inducing a premature exhaustion of ovarian reserve. In addition to ovarian suppression by GnRHa, oocyte and cortex cryopreservation has gained great interest although the cortex reimplantation implies a few drawbacks as the risk to reintroduce malignant cells. The capability of ovarian stem cells (OCSs) from fresh ovarian cortex fragments to differentiate in vitro to mature oocytes provides a tool to overcome these drawbacks. In fact, since ovarian cortex sampling and cryopreservation is practicable before gonadotoxic treatments, the recruitment of OSCs from defrsted fragments could provide a novel opportunity to verify their suitability to be expanded in vitro as oocyte-like cells (OLCs).

Methodology A cortex piece from a 28 yrs-woman, submitted to annexectomy for a benign ovarian cyst, was cryostored in liquid nitrogen for one year. The strips were thawed and the OSCs isolation performed by enzyme-free method. The recruited cell suspension was stratified on Ficoll gradient and centrifuged, then recovered, incubated at 4°C with rabbit polyclonal anti-Ddx4 and followed by further incubation with anti-rabbit-IgG-FITC antibody. The OSC suspension was then incubated with 7-amino-actinomycin-D-labelled with phycoerythrin-5 as viability dye, and evaluated by flow cytometric analyses.