

FIRST SUCCESSFUL OVARIAN TRANSPLANTATION AFTER STEM CELL CHEMOTHERAPY IN AUSTRIA

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Abstract Body

Ovarian cryopreservation for the purpose of fertility preservation prior to chemo- or radiotherapy has been considered as an experimental procedure for a long time and has been established internationally by now (1-3). In Innsbruck, Austria, this procedure has been performed since 2003 while the technique of cryopreservation has been modified many times over the last 17 years.

Due to Hodgkin's lymphoma, the patient opted for cryopreservation of ovarian tissue before starting chemotherapy more than 15 years ago. This was followed by high-dose chemotherapy with stem cell transplantation and subsequent amenorrhea. AMH was repeatedly below detectable range.

More than 15 years after cryopreservation, ovarian transplantation with chromopertubation (bilateral patency of tubes) was performed. After thawing, the ovarian tissue was placed in newly created peritoneal pockets in the right and left ovarian fossa. Thereupon, mature oocytes (n=6) were retrieved and cryopreserved already from the following menstrual cycle under clomiphene treatment for four cycles. Six months after ovarian transplantation, pregnancy occurred spontaneously. A healthy girl was delivered by caesarean section at term.

The present case report impressively demonstrates that ovarian tissue stored for more than a decade can be successfully transplanted. In addition, it emphasizes the need for immediate close follow-up after ovarian transplantation and the possibility of spontaneous conception despite transplantation into the fossa ovarica.