Introduction/Background Radical tracheectomy and bilateral pelvic lymph node dissection (PND) is a fertility preserving surgery for early stage cervical cancer. Pregnancy following treatment is feasible however patients often have fertility issues and their pregnancies have high complication rates. A retrospective cohort study was carried out to investigate fertility outcomes following this procedure in the regional centre.

Methodology 10 years of patient data was collected retrospectively between 2012 and 2022. Data was collected from their electronic care record (ECR) and Northern Ireland Regional Maternity System (NIMATS). Data included – future pregnancy at any gestation, spontaneous or assisted conception, if referred for fertility treatment, live birth rate and gestation.

Results 20 women had radical tracheectomy and pelvic node dissection during this time. Age range from 25–40 years old, mean: 32.5.18/20 (90%) of the women were primiparous x1 had 1 child, x1 had 2 children. Following surgery: 0 spontaneous conceptions. 9/20 (45%) referred for fertility treatment. 7/20 (35%) had >1 cycle of IVF. 4/20 (20%) women became pregnant following surgery – x3 had 1 pregnancy, x1 had 2 pregnancies. Of the 4 women who became pregnant – 1 (25%) miscarriage, 1 (25%) ectopic pregnancy, 1 (25%) ongoing pregnancy (severe OHSS following embryo transfer). Patient with 2 pregnancies, 1 miscarriage and 1 delivery of a live infant at 38+6 via ELCS. Overall 1/20 (5%) has had a live term infant born following treatment

Conclusion This study has shown that pregnancy is possible following tracheectomy, however 100% of the pregnancies required IVF which is not without its own risks (ectopic, severe OHSS). Some limitations – early miscarriages not recorded, short follow up window for some patients not giving time to allow for fertility follow up. A longer follow up period would allow for more thorough analysis of fertility outcomes

Evidence available on fertility following treatment of MOGCTs is scanty. The aim of this study is to evaluate the reproductive outcomes of patients treated with FSS for MOGCTs in MITO centres (Multicentre Italian trials in gynecologic oncology).

Methodology All the included patients were treated conservatively, both in primary surgery and for relapse. The indication for adjuvant chemotherapy in stage I disease varies among centres. Patients were sent a questionnaire evaluating their desire of conception, fertility and endocrine outcomes. Data were analyzed with descriptive statistics. Univariate and multivariate analyses were used to assess correlation between fertility outcomes and clinicopathological variables.

Results 164 patients were sent the questionnaire, that was completed by 114 patients (69.5%). Among all patients, 38 (33.3%) expressed a desire for pregnancy, 29 (76.3%) of which successfully conceived. 62.1% patients who conceived received adjuvant chemotherapy. 97.7% conceptions occurred spontaneously. Six patients entered menopause after treatment (5.3%), 5 of whom received chemotherapy. No statistically significant difference was detected in terms of fertility outcomes between patients receiving adjuvant chemotherapy and those addressed to surveillance. When analysing factors affecting the pregnancy rate, the desire of conception was the only statistically significant factor.

Conclusion The results of the present study suggest that fertility outcomes in MOGCTs patients despite surgery and chemotherapy are very promising. The only factor significantly affecting the pregnancy rate after a MOGCTs diagnosis is the desire of conception.