Introduction/Background Gestational trophoblastic neoplasia (GTN) occurs in among women of reproductive age. Chemotherapy can result in the loss of primordial follicles and reduced ovarian reserve. Using anti-Mullerian hormone (AMH) as a surrogate, we evaluated the impact of chemotherapy in patients who received chemotherapy for GTN.

Methodology This was a retrospective case-control study. Women aged between 20 and 44 years old with GTN who had received chemotherapy, or with treated molar pregnancy were identified between 2012 and 2018. AMH levels were measured at pre-treatment, 6, 12, and 24 months. Demographic factors, clinical characteristics, and AMH levels between the 2 groups were compared using Mann Whitney U test and the difference between different time points was analysed using Wilcoxon signed rank test or Friedmann’s test.

Results 57 GTN patients and 18 age-matched controls with molar pregnancies aged 20–45 years old were identified. There was no difference in the demographic factors. No significant difference in AMH levels was observed between GTN and molar pregnancy at all time points. However, among those receiving combination chemotherapy for GTN, post-hoc analysis showed a significant difference between pre- and 12 months post-treatment (Z=-2.29, P=0.02), pre- and 24 months post-treatment (Z=-2.29; P = 0.02). To adjust for the effect of age on AMH levels, all serum AMH levels were expressed as multiples of the median (MoM) against age-specific AMH reference ranges for Chinese women. Only the use of combination chemotherapy was correlated with the MoM. 

Conclusion Our results showed that single agent chemotherapy did not adversely affect the AMH level regardless of number of cycles. The only factor that might possibly lower the AMH level was the use of combination chemotherapy. This study would help provide better counselling to patients with GTN with regards to the effects of chemotherapy on subsequent ovarian reserve.

Vaginal and vulvar cancer

Introduction/Background To study the epidemiological profile of patients diagnosed with vaginal malignant neoplasms (VMN) in the Republic of Belarus for a 30-year period.

Methodology The data of Belarusian Cancer Registry were used (1990 to 2019). The information analyzed were: incidence and mortality rates, age and stage distribution, survival outcomes.

Results Totally of 868 newly diagnosed cases of VMN were identified. The estimated age-standardized incidence rate of VMN per 100,000 female population has increased from 0.1 in 1999 to 0.4 in 2019 (p >0.05). The mortality rate amounted 0.0–0.2 per 100,000 female population. Of all newly diagnosed cases of VMN, 70.9% (615) were residents of the city and 29.1% (253) were rural residents. Comparison of three ten-year periods (1990–1999, 2000–2009 and 2010–2019) showed that the rate of cases of VMN detected in stage I increased almost doubled (from 19.1% to 38.5%), the rate of stage III sharply decreased (from 30.3% to 13.0%), while for stages II and IV were no changes. Comparison of 5-year adjusted survival rates between 2000 and 2015 showed increased for stages I, II and III, moreover the survival rate of stage III increased in 2.4 times. The overall 5-year survival rates for the entire group was 68.7±5.1%, with no statistically significant difference between urban and rural women 67.8±5.1% and 65.8±10.4%, respectively, p = 0.99.

Conclusion This population-based dataset confirms that in Belarus the incidence of VMN have been increasing over the last 30 years, and the mortality approximately remained stable.