Centralization and Implementation of National Guidelines of Ovarian Cancer Improved Survival – A population-based nationwide SweGCG study

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Conclusion

Centralization of primary care of advanced ovarian cancer was recommended in the first Swedish National Guidelines.

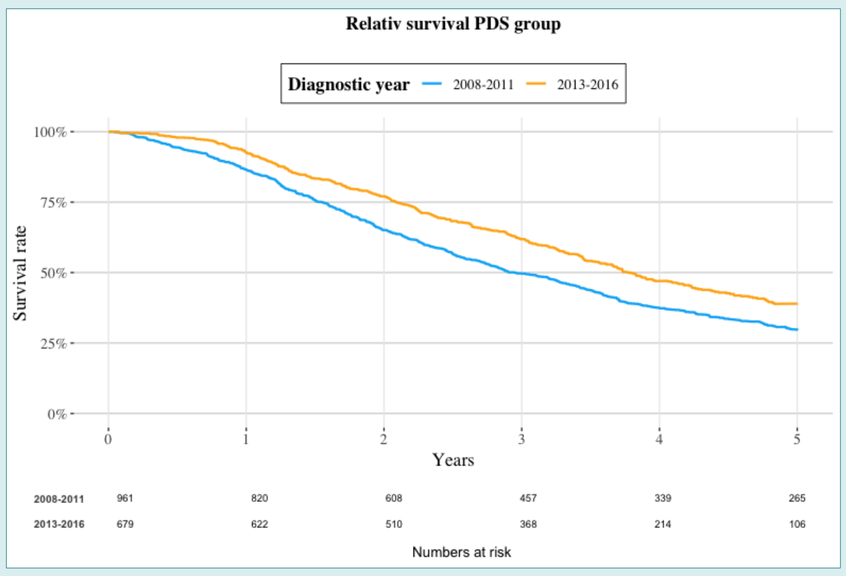
After centralization the proportion with complete cytoreduction was significantly increased both in the PDS-chemo and NACT+IDS cohorts. The relative survival was significantly increased in the PDS-chemo cohort of stage IIIC-IV epithelial ovarian, fallopian tube and primary peritoneal cancers

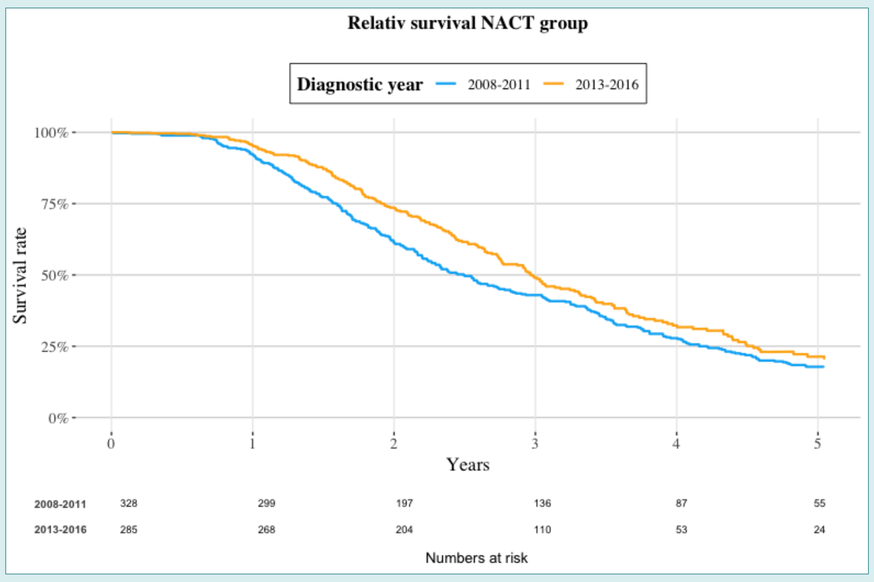
Background and Aim

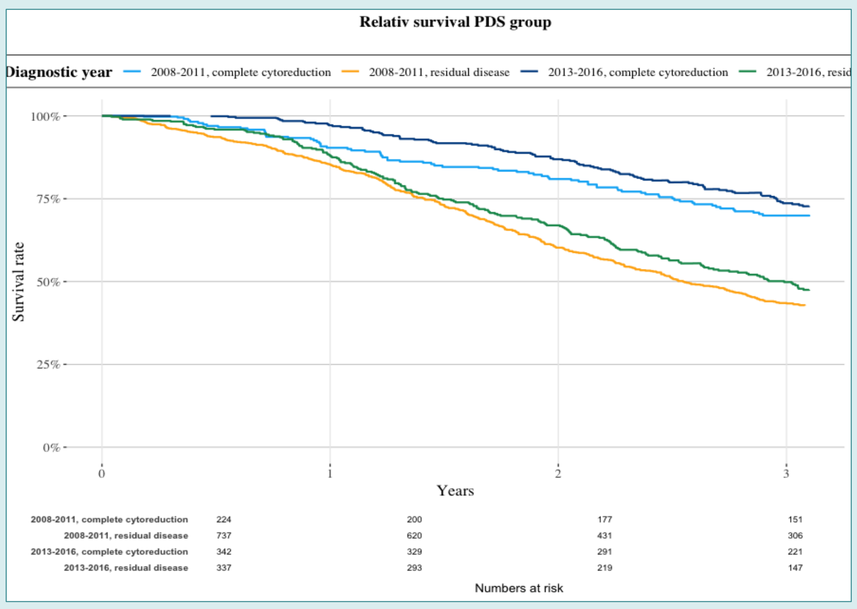
The first Swedish national guidelines for ovarian cancer, implemented in 2012, recommended centralization to tertiary centres and primary debulking surgery (PDS) to no macroscopic residual disease (R=0) if achievable. Neoadjuvant chemotherapy (NACT) followed by interval debulking surgery (IDS) was recommended according to predefined criteria. The aim of this study was to evaluate frequency of macroradical surgery in epithelial ovarian, fallopian tube cancers and primary peritoneal cancer FIGO stage IIIC-IV before and after centralization and the impact on relative survival (RS).

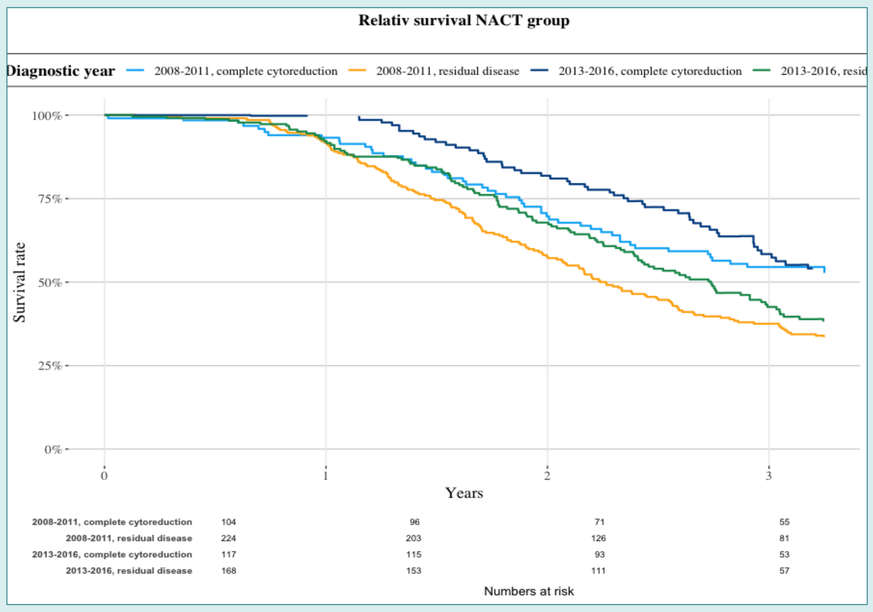
Method

Women diagnosed with epithelial ovarian, fallopian tube cancers and primary peritoneal cancer FIGO stages IIIC-IV and registered in the population-based nationwide Swedish Quality Registry for Gynecologic Cancer (SQRGC) between 2008-2016 constitutes the study cohort excluding those diagnosed in 2012 when the guidelines were implemented. Comparisons of RS before and after the implementation, 2008-2011vs 2013-2016, were performed in the cohorts of PDS-chemo and NACT+IDS. Relative survival (RS) was calculated using the Ederer II method. The validity of SQRGC has previously been reported (1).









Result

3698 women with stage IIIC-IV were included, where 2256 women had PDS-chemo (n=1640) or NACT+IDS (n=616) performed as primary treatment. Significantly more patients were treated at tertiary centers with PDS after (74.5%) compared to before (42.6%) (p<0.01) centralization.
The proportions of complete cytoreduction at PDS-chemo to R=0 increased from 23.3% to 50.5% (p<0.01) after centralization. In the PDS-chemo cohort, the 5-year RS ratio increased significantly from 29.8% (95%CI; 26.9-33.0%) to 39% (95%CI; 34.8-43.7%). In the NACT+IDS cohort the proportion of complete cytoreduction to R=0 increased from 31.7% to 41.0% (p<0.01) and the 5-year RS ratio increased from 17.8% (95%CI; 14.0%-22.6%) to 21.3% (95%CI; 16%-28.4%).
The median survival in the PDS-chemo cohort increased from 2.95 years (95%CI; 2.74-3.28) before to 3.78 (95%CI; 3.53-4.18) after implementation and for the NACT+IDS cohort from 2.49 years (95%CI; 2.24-2.84) to 2.97 (95%CI; 2.74-3.32) respectively.

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Referenc
Rosenberg P, Kjolhede P, Staf C, Bjurberg M, Borgfeldt C, Dahm-Kahler P, et al. Data quality in the Swedish Quality Register of Gynecologic Cancer - a Swedish Gynecologic Cancer Group (SweGCG) study. Acta Oncol. 2018;57(3):346-53.

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