



Mortality in the first year after ovarian cancer diagnosis

National Cancer Intelligence Network Data Briefing

Introduction

International studies show lower ovarian cancer survival rates in the UK than in other countries with comparable health care systems.

Building on previous work that showed a particularly high mortality rate in the first month or two after diagnosis¹, this analysis considered the association between excess mortality rates and relevant patient and tumour factors in three periods within the first year after diagnosis of ovarian cancer in England.

Results

Of 14,827 women diagnosed with ovarian, tubal or primary peritoneal cancers (ICD-10 C48, C56-C57, here termed as ovarian cancer) in England in 2008 to 2010, 5,296 (36%) died in the first year, with 1,673 deaths in the first month after diagnosis.

Route to diagnosis was one of the most important factors affecting mortality in the first year after diagnosis. After adjusting for other factors including age and tumour stage, the excess mortality rate in the first month after diagnosis was six times higher for patients diagnosed after an emergency presentation, than for those diagnosed via an urgent GP referral for suspected cancer (Figure 1). The higher excess mortality rate persisted throughout the first year (two times higher for one to six months after diagnosis and 1.5 times higher for six to twelve months after diagnosis). Women diagnosed by an unknown route also had a higher excess mortality rate in the first month after diagnosis (five times higher).

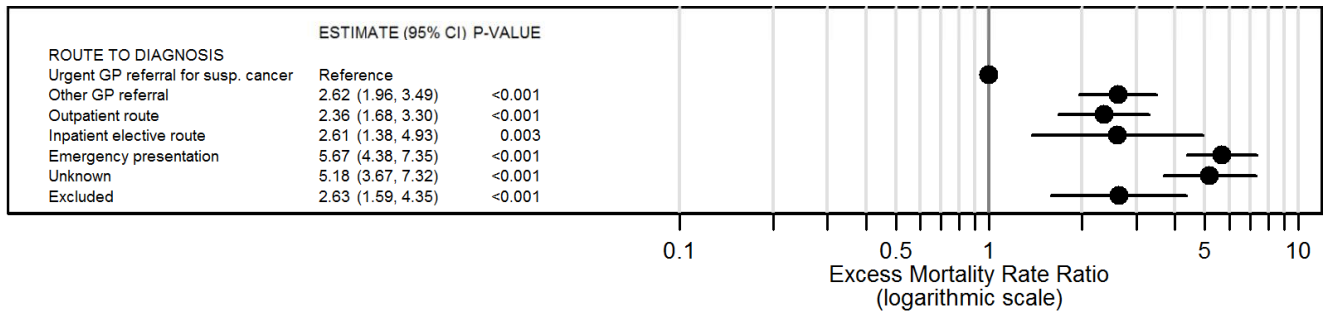
Age over 70 years, and unspecified or unclassified epithelial morphologies also appeared to have a substantial impact on mortality in women with ovarian cancer in the first year after diagnosis.

Key messages

36% of women diagnosed with ovarian cancer in 2008-10 died in the first year.

Throughout the first year, factors associated with early deaths were:

- age over 70 years
- diagnosis after an emergency presentation or by an unknown route
- unspecified or unclassified epithelial morphologies

Figure 1: Excess mortality rate ratios in the first month after diagnosis with ovarian cancer, by route to diagnosis

Of those women who died in the first year after diagnosis, 58% did not receive any surgery or chemotherapy treatment (as recorded in Hospital Episodes Statistics data). This is most likely because they were already too unwell to cope with these treatments, with a considerable reduction in the excess mortality rate for patients who did not receive treatment after case-mix adjustment. Despite this, there remained some important differences in mortality rates for patients who had not received treatment by one month and six months after diagnosis.

Conclusion

The results suggest the need to increase symptom awareness, promote timely GP referral and optimise diagnostic and early treatment pathways within secondary care, to increase access to treatment for women with advanced stage invasive epithelial ovarian, tubal and primary peritoneal cancer. This process should be pursued alongside continued efforts to develop primary prevention and screening strategies.

Further information

This briefing is based on the analyses reported in the following journal paper; for further information on the data definitions, methods etc, please refer to: Barclay M, et al, Factors affecting short-term mortality in women with ovarian, tubal, or primary peritoneal cancer: population-based cohort analysis of English National Cancer Registration data, *Int J Gynecol Cancer* (2016), <http://dx.doi.org/10.1097/IGC.0000000000000562>

1. NCIN data briefing (2013). Short term ovarian cancer mortality. http://www.ncin.org.uk/publications/data_briefings/short_term_ovarian_cancer_mortality

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www.ncin.org.uk/publications/reports/

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