Pregnancy outcomes following bone marrow transplantation

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Objective

Female childhood cancer survivors have increased risk of preterm birth (PTB), with relatively little known about pregnancy outcomes for women treated with bone marrow transplant (BMT) +/- total body irradiation (TBI), and management is likely variable. Preconception counselling and early referral to high-risk PTB prevention clinics (PTBPC) may improve outcomes. The British Society of Blood and Marrow Transplantation and Cellular Therapies (BSBMTCT) Data Registry holds detailed records for those who have received BMT in the United Kingdom and some units in the Republic of Ireland since 1974. The British Childhood Cancer Survivor Study (BCCSS; n=17,980) and Teenage and Young Adult Cancer Survivor Study (TYACSS; n=200,945) are large population-based cohort studies of five-year survivors of cancers which have been linked to Hospital Episode Statistics for England (HES). We are jointly funded by Action Medical Research/Borne to determine: 1. Current care offered to women who conceive following BMT +/- TBI. 2. Incidence of adverse pregnancy outcomes for these women.

Methods

Anonymised retrospective data linkage study between the BSBMTCT and BCCSS/TYACSS datasets was performed, linking according to encrypted date of birth, diagnosis, and year of transplant. Statistical analysis was then performed to provide information regarding pregnancy outcomes following BMT.

Results

Data for 34 pregnancies among 24 women with previous BMT +/- TBI were successfully matched. We continue to perform analysis and will present our data regarding the following pregnancy outcomes: underlying diagnosis, cancer management and treatment, decade of cancer treatment, gestational age at birth, mode of labour and birth, and birthweight.

Conclusion

We will present discussion of our experience of data linkage in this setting and will present our findings providing information regarding pregnancy outcomes for women who have previously had a bone marrow transplant.