

Early ultrasound screening for fetal malformations in the second pregnancy after combined modality treatment for Hodgkin's disease

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Objective

Therapeutic progress in Hodgkin's disease (HD) has led to a high rate of cure, but at the expense of some side effects. Abnormalities reported so far are: cardiac toxicity, pulmonary toxicity, endocrinal failure, second cancers and congenital malformations. Although several studies reported in the literature showed no or slightly increased risk of congenital abnormalities among newborns of women previously treated for Hodgkin's disease compared with the general population, abnormalities occur and sometimes they are very difficult.

Methods

We report a case of one patient, 25 years old from Macedonia who presented Hodgkin's disease, a subtype nodular sclerosis, stage IIIA. The patient received chemotherapy according to ABVD protocol – 6 cycles. Thereafter she received mantle field radiation with 3600 cGy and was followed for the next 36 months till she she became pregnant.

Results

Ultrasound confirmed a normal fetus in first pregnancy of appropriate gestational age. A normal female baby was born with Caesarian section at term. Clinical assessment in the follow-up period showed normal development. Also the mother was assessed regularly and free of disease. The next pregnancy occurred 87 months after completion of treatment. At 13 weeks of gestation, ultrasound assessment revealed malformations and induced abortion was suggested. A male fetus with malformations on the head such as proboscis, cyclopia and omphalocele on the front abdominal wall containing liver and small bowels was found. After induced abortion the autopsy from the Institute of Pathology reported male fetus with malformations on the head such as proboscis, cyclopia (one eye beneath proboscis) and omphalocele on the frontal abdominal wall containing liver and small bowels. Other findings were normal. The patient has been followed-up regularly until now. She is disease free, with no more pregnancies.

Conclusion

We consider this case is important to bring the potential late side-effect to the attention of both patients and doctors. They should be alert for the risk of congenital abnormalities in newborns of women previously treated for Hodgkin's disease especially with combined modality treatment and should check for them during pregnancy, at birth, early childhood or adulthood. Treatment with chemotherapy, radiation therapy or both may have adverse effects on germ cell survival, fertility and health of offspring. Congenital abnormalities occur in 3-5% of all live-births and the possibility of an increased risk of congenital abnormalities in newborns cannot be ignored.