

Paternity and testicular function among testicular cancer survivors treated with two to four cycles of cisplatin-based chemotherapy - Abstract

Contributed by Administrator
Thursday, 29 April 2010

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Preserved fertility is an important issue for testicular cancer (TC) survivors.

Our aim was to examine any difference regarding paternity and testicular function following two, three, or four cycles of cisplatin-based chemotherapy for TC.

A national multicentre follow-up survey assessing morbidity among survivors of unilateral TC diagnosed from 1980 to 1994 was conducted during the period 1998 to 2002. Of the 1814 men invited, 1462 (80.6%) participated by responding to a mailed questionnaire and/or undergoing a clinical examination including laboratory assessments. The present study includes the 316 participants up to 65 yr of age treated with two to four cycles of standard cisplatin-based chemotherapy without additional treatment beyond surgery.

Self-reported paternity following treatment for TC according to number of cycles was assessed among men who reported antegrade ejaculation and attempts at posttreatment conception (n=106). Kaplan-Meier analysis, log-rank test, and Cox regression were applied. Gonadal hormones (n=305-314) and sperm counts (n=71) by number of cycles were assessed by linear by linear association or Mann-Whitney tests.

At median 12-yr follow-up, 80% (85 of 106) had succeeded in their attempts of achieving posttreatment paternity (two cycles: 100%; three: 83%; four: 76%; p=0.022). For all patients the 15-yr actuarial paternity rate was 85%. The association between posttreatment paternity and number of cycles remained significant in the multivariate analysis (p=0.032). High serum follicle-stimulating hormone values were more common with increasing number of cycles (p=0.037), but there were no differences in serum luteinising hormone, serum testosterone, or sperm counts. Few men treated with two cycles and a limited number of sperm samples are the main limitations of this study.

The prospects of future paternity after two to four cycles of cisplatin-based chemotherapy are good, and our data suggest that the prospects improve with decreasing number of cycles.

Written by:

Brydøy M, Fosså SD, Klepp O, Bremnes RM, Wist EA, Wentzel-Larsen T, Dahl O. Are you the author?

Reference: Eur Urol. 2010 Apr 2. Epub ahead of print.

doi: 10.1016/j.eururo.2010.03.041

PubMed Abstract

PMID: 20395037

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