Serum Testosterone Level and Semen Indices in Sulfur Mustard Exposed Men: Comment on "Sperm Chromatin Structure Assay Analysis of Iranian Mustard Gas Casualties: A Long-Term Outlook"

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Dear Editors,

We read with great interest the article by Safarinejad [1], which investigated an association between sulfur mustard (SM) exposure and sperm DNA damage using sperm chromatin structure assay on SM-injured and non-SM-injured infertile and fertile men. Accordingly, spermatozoa from SM-injured subjects had more abnormal chromatin than their non-SM-injured counterparts [1]. This article is quite interesting as the relationship between SM exposure and sperm DNA integrity has not been hitherto reported in the literature [1–3]. However, there are 2 controversial findings in the study by Safarinejad. In table 1 of the results section, Safarinejad recorded 122.7 nmol/l as the mean value of serum testosterone level in non-SM-injured healthy fertile men (group 4 of the study). In contrast, the mean serum level of testosterone in other studied groups including SM-in-

jured infertile and fertile men and non-SM-injured infertile individuals was about 12.6 nmol/l. Nonetheless, under serum hormones subheading, insignificant difference was concluded among the study groups with regard to this serum hormone [1]. The mean serum level of testosterone in group 4 of the study seems irrelevant to the reference values (i.e. 9.36–37.10 nmol/l) as well [4].

The second ambiguous finding of the study is under semen values subheading in the results section. Safarinejad indicated that the mean ejaculate volumes in non-SM-injured controls and SM-exposed patients were not statistically significant. Nevertheless, statistical analysis of this comparison yielded P value of 0.01 which is less than 0.05 (indicative of the statistical significance) [1]. Since no similar studies are currently available in the SM-related literature, we therefore suggest the author elucidate these discrepancies in the results section to provide more accurate conclusions for the clinicians and researchers in this regard.

References

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