Young male cancer survivors may benefit from testosterone replacement

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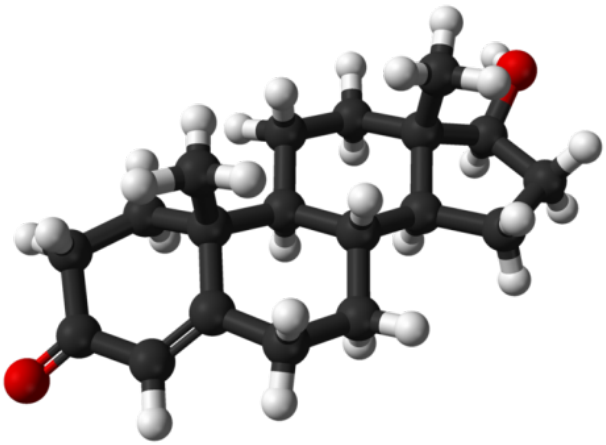

Ball-and-stick model of the testosterone molecule, $C_{19}H_{28}O_2$, as found in the crystal structure of testosterone monohydrate. Credit: Ben Mills/Wikipedia

In young male cancer survivors with low testosterone levels, testosterone replacement therapy is associated with an improvement in body composition, according to a new study published this week in *PLOS Medicine* by Richard Ross of University of Sheffield, UK, and colleagues.

Young male cancer survivors have lower testosterone levels than the healthy population, associated with increased trunk fat mass and worse quality of life than matched controls. In the new study, researchers randomized 136 male cancer survivors aged 25 to 50 years old with borderline low testosterone levels to either receive a placebo gel or Tostran 2% testosterone gel. Participants applied the gel to their skin daily for 26 weeks.

At the conclusion of the study period, men treated with testosterone had an average decrease of 1.8 kg fat mass (95% CI -2.9 to -0.7, p=0.0016) and an average increase of 1.5 kg lean mass (95% CI 0.9 to 2.1, p