Hormonal male contraception (HMC): any future?

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Despite the fact that female contraception is very effective and well accepted, there is a demand for male contraceptive methods beyond condom and vasectomy. This demand comes from females in order to share the burden of contraception with men, as well as from males so that they may contribute actively to family planning and regain reproductive power. Of all approaches to male contraception methods based on hormonal suppression of spermatogenesis are most advanced. However, more than four decades of research have not yielded a practical method suited for general use. Aiming at suppression of sperm counts as the surrogate end-point parameter the principle of HMC has been established in about 70 clinical trials. In a few efficacy trials the contraceptive potential of HMC could be demonstrated. Unfortunately, the last large multicenter efficacy trial based on injectable testosterone undecanoate and norethisterone enanthate and conducted under WHO/CONRAD auspices was prematurely suspended, but showed excellent contraceptive protection. Learning from this extensive clinical trial experience to date an injectable or - even better - a self-administered (e.g. transdermal or oral) testosterone/gestagen combination could be designed that would fulfill all requirements for general acceptance. However, such development requires generous sponsorship that cannot be found in the pharmaceutical industry as the anticipated return appears not to justify the investment. Thus HMC will have a future if, in addition to current efforts by the Population Council and the NIH, forward-looking governmental or non-governmental organisations would support the necessary final steps on a large scale to bring research efforts to fruition.

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