Improving sperm quality in the absence of animal products and CITES restricted herbs by Lee Butler, BSc (Hons), MSc

Historically herbal formulas for male reproductive health have contained a variety of animal products from fish gall bladders and seahorses to the testicles and penis of numerous animals. These products are currently banned in the UK, leaving a substantial gap in the herbs and formulas at the disposal of Chinese herbalists in my country. There are however, herbs not derived from animals/animal products that have been proven to be quite effective. In my research, the herbs that were beneficial to sperm health were, as one might expect, nourishing herbs/formulae, however for some the research was focused more on their protective/antioxidant effect, possibly due to the well-established detrimental effect that oxidation has on sperm health (Du Plessis et al., 2015).

Unfortunately, the majority of research published in English does not discuss TCM pattern differentiation with regard to subjects and herbs/formulae used, but rather they appear to be chosen for their supposed actions and then assigned to patients fitting a Western diagnosis. However, the following may still prove useful information for practitioners in the choice of herbs/formulae in the treatment of poor sperm quality:

Individual Chinese herbs

Hou Po (Magnolia Officinalis). Seen to protect sperm motility by inhibiting lipid peroxidation (Lin et al., 1995).

Huang Qi (Astragalus membranaceus). In vitro was able to increase sperm motility by 146.6 % (Hong et al., 1992) and in later trials on humans was seen to have a similar effect along with **Wu Jia Pi** (Cortex Acanthopanacis) (Liu et al. 2004).

Bu Gu Zhi (Fructus Psoralea corylifolia). A small trial involving rats (8 with two control groups) found that Bu Gu Zhi may have a beneficial effect on spermatogenesis (Yang et al., 2008).

Shan Zhu Yu (Fructus Corni Officinalis) enhanced the motility of sperm in vitro by 120% (Jeng et al., 1997). Yang et al., (2003) found an increase in sperm motility of just over 64% in 36 patients with 'blood stasis' type chronic prostatitis (dosage, 3 g three times a day for 60 days).

Gou Qi Zi (Fructus Lycii). In a trial on rats, Luo et al., (2006) found the anti-oxidant properties of this herb to have a protective effect on sperm DNA.

Traditional formulas

Bu Zhong Yi Qi Tang. May improve sperm concentration and motility (dose 7.5g a day) (Furuya et al., 2004)., Amano et al., (1996) and Yoshida et al., (1986) all found it increased sperm count and motility. Furuya et al., (2004) found it have protective effect on sperm

Ba wei di huang wan. Usuki, (1986) found a 78% increase in the sperm count of men previously diagnosed with oligozoospermia after taking 7.5g day for 8-28 weeks. Was shown to increase serum estradiol-17 beta levels, which in turn are thought to have a protective effect on sperm cells

Liu wei di huang wan. Seen in rats to improve quality and quantity of sperm, though further details not available in English (Ling et al. 2006), however Oh et al. (2007) suggest it is due to its ability to protect against reproductive toxicities.

Shao-Fu-Zhu-Yu-Tang. In an open trial, Yang et al. (2003) found this formula to increase sperm quality, motility and count.

Sairei-to (a Kampo formula combining xiao chai hu tang and wu ling san). Improved motility and count in men previously diagnosed with oligozoospermia and asthenozoospermia. Though this formula appears to have been chosen for its anti-oxidant properties (Suzuki et al.,2003).

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