

Direct effects of Chinese herbal medicine "hochuekkito" on sperm movement

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BACKGROUND AND PURPOSE: Chinese herbal medicine, "Hochuekkito" is widely used for male infertility in Japan. There have been many reports concerning its clinical usefulness but very few reports of in vitro experiments studying the mechanism of its effects. In addition to stimulating germ cells, we analyzed its direct effects on sperm using computer assisted semen analyzer (CASA).

MATERIALS AND METHODS: Motile sperm were prepared using swim up technique from semen collected from ten healthy volunteers. Sperm movements (motility, velocity, linearity) were analyzed by CASA after adding either serum containing anti-sperm antibody (ASA) or normal serum with or without Hochuekkito.

RESULTS: Two hours after adding serum with ASA, the decrease of sperm motility was significantly reduced from 25.1% (92.8%-->67.7%) to 12.5% (92.9%-->80.6%) by adding Hochuekkito. No significant difference in velocity and linearity was observed between two groups. By adding normal serum, any of three parameters differed significantly with or without Hochuekkito.

CONCLUSION: Protective effects of Hochuekkito on sperm was suggested. Although normal sperm with ASA was used in this report, since the sperm of infertile patients are said to be more fragile, this results imply that direct protective effect is one of the mechanism of Hochuekkito for male infertility