SUPPRESSION OF MOTILITY OF HUMAN SPERMATOZOA WITH CRUDE EXTRACT OF *PIPER BETELE* (L) LEAVES

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Polyvinylpyrrolidone (10,000 MW) coprecipitate of dichloromethane methanol (1:1) extract of *Piper betele* (L) leaves were investigated (n=9) for antimotility effects on human washed spermatozoa (up to 60min. of incubation) using three parameters (percentage motility, average forward velocity and motility index). The concentrations tested were 0.25, 0.5, 1.25, 2.5 or 5.0 mg/ml. The extract impaired these motility parameters in a dose related manner. The concentrations producing 50% inhibition were : percentage motility 0.47 $\pm$ 0.11 mg/ml, average forward velocity 0.37 $\pm$ 0.07 mg/ml and motility index 0.31 $\pm$ 0.02 mg/ml (mean $\pm$ s.e.m.). Furthermore, the antimotility effect were irreversible and was not accompanied either with changes in the fluidity of the plasma membrane (hypo osmotic swelling test) or the viability (nigrosin eosin stain) of spermatozoa. The results suggest that potent antimotility agent/s may be isolated from *Piper betele* (L) leaves.