

## ABSTRACT

### **In Vitro Effects of KY Jelly<sup>®</sup> and Durex Play<sup>®</sup> on Human Sperm Quality**

**Objective:** To compare in vitro effects of KY Jelly<sup>®</sup> and Durex Play<sup>®</sup> on human sperm quality.

**Design:** An analytical observational, prospective study.

**Setting:** Clinic of Andrology, Dr. Soetomo Hospital, Surabaya, Indonesia.

**Patient(s):** fifteen patients who underwent sperm analysis.

**Intervention(s):** sperm were obtained by masturbation, after liquefaction then initial evaluation performed. Sample were divided into three 1.5 ml aliquots which one added by 10 % (v/v) of KY Jelly<sup>®</sup>, the second one added by 10% (v/v) of Durex Play<sup>®</sup> and the third one performed as a control. Next evaluation were performed after thirty and sixty minutes of incubation.

**Main Outcome Measure(s):** pH was examined by pH paper, viscosity, viability, motility and morphology was examined by sperm analysis performed as WHO guidences.

**Result(s):** The results of statistical analysis with paired t test obtained both lubricants have significant influence on sperm pH, viscosity, viability, morphology and motility on all samples. The Analysis of Variants (ANOVA) obtained significant differences after sixty minutes for rapid progressive motility (grade a motility) (p=0,018) and progressive motility (grade a+b motility) (p=0,047).

**Conclusion(s):** The effects of KY Jelly<sup>®</sup> and Durex Play<sup>®</sup> were decreased the sperm progressive motility significantly after sixty minutes.

**Key words:** Lubricants KY Jelly<sup>®</sup> and Durex Play<sup>®</sup>, Sperm quality.