

Maarit Niinimäki

maarit.niinimaki@oulu.fi

Department of Obstetrics and Gynecology, University Hospital of Oulu, Finland

p.o. BOX 24, 90029 University Hospital of Oulu

“ Medical compared with surgical management in induced abortions and miscarriages”

Thesis in 4th of December, 2009

ABSTRACT

Each year approximately 11,000 induced abortions are performed in Finland, the majority of these women being younger than 25 years of age. Medical abortion with the antiprogesterin mifepristone and the prostaglandin analogue misoprostol is increasingly being used instead of surgical method (dilatation of cervix and uterine evacuation with instruments). Similarly, miscarriages can be treated with medical or surgical management. Still, clinical outcomes of the medical treatment of miscarriage are not well established, and various different regimens exist.

The aim of this study was to investigate the frequency and risk factors of repeat abortions and immediate post-abortal complications, focusing especially on the impact of the method of abortion. National health registries were used as a data source. Another part of the study was aimed at comparing the efficacy, acceptability and cost-effectiveness of the medical and surgical treatment of miscarriage.

In national cohort, the risk of repeat abortion was associated with sociodemographic characteristics (parity, previous abortion, low socioeconomic status, being unmarried but cohabiting or single), but not with the method of abortion. The risk of repeat termination of pregnancy decreased with age, among women living in rural area, and when intrauterine devices or sterilization were planned for future contraception.

The overall incidence of adverse events was 4-fold greater in the medical compared to the surgical abortion cohort. Hemorrhage and incomplete abortion were more common following medical abortion, but the incidence of infections did not differ.

Medical and surgical treatment of miscarriage were compared in a randomized setting; the efficacy of the treatment did not differ. Medically treated patients were less satisfied with the treatment and had experienced more pain.

In the cost analysis, the primary costs of the surgical treatment were higher, but more unexpected events and complications increased the secondary costs in the medical group.

In summary, medical abortion offered a good alternative to surgical method without increasing the risk of repeat abortions, but with an increased risk of short-term adverse events. The medical method was efficient in treating miscarriages, and the majority of women were satisfied with the treatment. Neither of the methods was economically superior in treating miscarriage.