

## **Influence of cervical canal shape on embryo transfer feasibility**

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### **ABSTRACT**

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**Purpose:** To investigate the impact of cervical canal shape on embryo transfers feasibility.

**Materials and methods:** A retrospective study on the influence of the cervical canal shape on ET complications was conducted among one thousand patients undergoing embryo transfers in the period between 01.2011- 08.2012. The patients, based on ultrasound appearance of the cervical canal, were allocated into one of the following groups: group “I” with straight cervical canal, group “J” with cervical canal bended one time, group “C” with cervical canal bended two times in the same direction and group “Z” with cervical canal bended two times in the opposite direction.

**Results:** Out of the one thousand cases studied, the most prevalent cervical canal shapes were type I

(440 cases) and type J (321 cases), 19% (185) of the women had a type C cervix and 5% (54) a type Z cervix. The highest rate of uncomplicated embryo transfers was noted in single bended cervical canals, 85%. Double bended cervical canals were characterized by a high rate of complications during embryo transfer reaching 80%.

**Conclusions:** The results of the present study indicated that the shape of cervical canal has a great influence on embryo transfer feasibility. Special attention should be given to patients with double bended cervical canal, where the rate of complication is highest.

**Key words:** cervical canal, embryo transfer, guiding catheter, uterine cervix

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