

Quality control in ART centers

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The Devil is in the Details

- Commitment of the team
- Continuous education → check every year
- Pollution can be the devil – example: Beijing (? Genk)

The Devil is in the Details

- Speed of handling – temperature
 - Small incubators
 - Invest in incubators – 30 min recovery time → ↑apoptosis, less blastocysts
 - During oocyte / embryo handling
- Influence temperature
 - ↓ fertilization
 - ↓ viability
 - Meiotic spindle changes

The Devil is in the Details

- Quality control
 - Sperm survival test
 - endotoxins
 - HEA
- Pick-up procedure
 - Tubal length
 - Small needle – less bleeding
 - Single lumen needle
 - Speed of handling
 - ?? Aspirate small follicles
- Less hand washing
- Pencils – not out of the lab

The Devil is in the Details

- Mini-incubators
 - Corrected gas mix
 - Low oxygen (< 5%) → less ROS → ↓FR → ↑ IR
 - During oocyte / embryo handling
- Influence temperature
 - ↓ fertilization
 - ↓ viability
 - Meiotic spindle changes

The Devil is in the Details

- Evaluation eggs / embryos
 - Clustering → imprinting diseases
 - Large polar body → aneuploidy
 - Size equality more important than fragments

- Embryo transfer
 - Cleaning cervix
 - Don't touch the fundus
 - US guided
 - Soft catheters