



Fresh Microdissection Testicular Sperm Extraction Results in a Higher Retrieval Rate of Sperm Acceptable for Intracytoplasmic Sperm Injection Compared to Frozen-Thawed Microdissection Testicular Sperm Extraction

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Aim • We hypothesized that fresh mTESE results in higher rate of obtaining sperm acceptable for ICSI compared to frozen-thawed mTESE

Methods • Retrospective review performed on non-obstructive azoospermic men who underwent mTESE at our institution between April 2007 and October 2019

• Primary endpoint was rate of obtaining sperm usable for ICSI, which was defined as motile sperm at time of fresh mTESE or post-thaw motile sperm after frozen-thawed mTESE

ABBREVIATIONS:
ICSI = intracytoplasmic sperm injection
mTESE = microdissection testicular sperm extraction





Results

- 103 men underwent 121 mTESEs
- In the entire cohort, fresh mTESE yielded significantly higher retrieval rates of motile sperm acceptable for ICSI compared to frozen-thawed mTESE ($p < 0.001$)

	Fresh mTESE (n=27)	Frozen-Thawed mTESE (n=94)
Surgical Sperm Retrieval (n, %)	24 (88.9)	36 (38.3)
Motile Sperm Retrieval (n, %)	24 (88.9)	31 (33.0)
Post-Thaw Motile Sperm (n, %)	N/A	17 (18.1)

Conclusions

- There is a percentage of men whose decision to undergo frozen-thawed mTESE precluded their ability to proceed with an ICSI cycle based on the surgery results
- Patients should be counseled on the likelihood that frozen-thawed mTESE may result in successful sperm retrieval but inability to proceed to ICSI

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sperm extraction