MP44-16

Microdissection Testicular Sperm Extraction for Non-Obstructive Azoospermia – Is Longitudinal Testicular Incision Better?

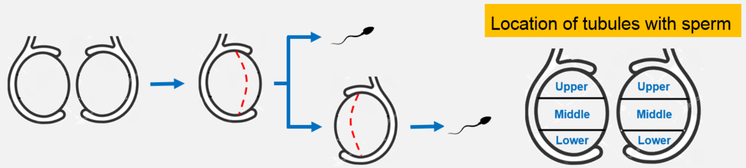
Cheng-Han, Tsai, Wei-Jen Chen, I-Shen Huang, William J. Huang
Department of Urology, Taipei Veterans General Hospital, Taipei, Taiwan
Shu-Tien Urological Research Center, Taipei, Taiwan
School of Medicine, National Yang-Ming University, Taipei, Taiwan

Introduction & Objectives

There are controversies on the orientation of incision on the testis while at doing mTESE. Horizontal incision is advocated to avoid damages of the circumferential sub-tunical arteries.
The purposes of this study :
(1) to analyze the location of sperm yield at mTESE by using longitudinal incision.
(2) to discuss the impact of longitudinal incision to the change of testicular volume.

Materials & Methods

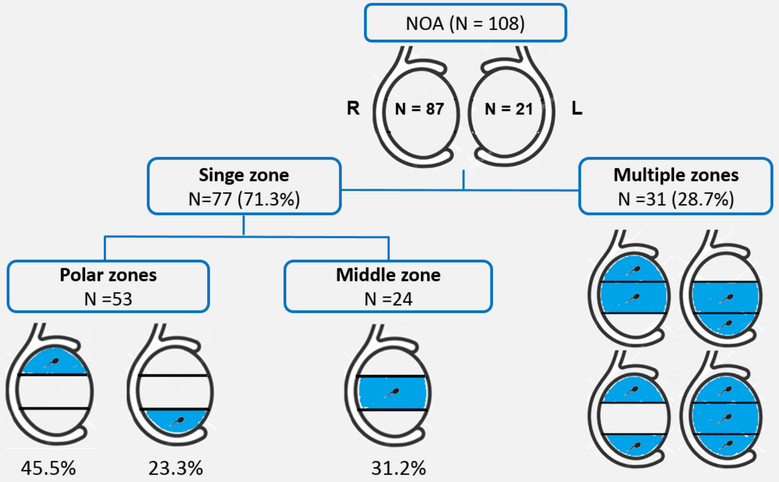
- A total of 108 men with NOA had sperm identified at mTESE in our institute from 2013 to 2018.



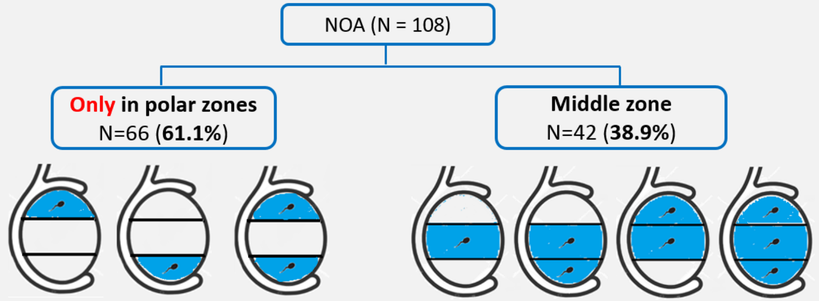
- All patients received a therapeutic mTESE at a later session and the testicular size was measured again.

Results

- Among these men, 87 (80.6%) had sperm identified at the first testicle, and 21 (19.4%) needed to explore the contralateral side.
- In 71.3% men sperm were found only in a single zone and in 28.7% sperm were seen in multiple zones.
- Among patients with sperm retrieval in a single zone, the most popular sites were at the upper pole, which was followed by the middle part and the lower pole respectively.



- Overall, in 38.9% men sperm were identified at least in middle zone, while in 61.1% men sperm were only found at the polar zones.
- There was no significant difference in demographic data among patients with various sperm presenting patterns.
- At the later therapeutic mTESE, sperm was successfully retrieved in all patients at the previously registered positive location and there was no testicular atrophy identified.



Conclusions

- **Single longitudinal incision** for mTESE is more likely to have a thorough exploration of the testicular parenchyma.
  → Transverse incision : miss **61.1%** chance of sperm retrieval.
- **No** case of testicular atrophy noted.