

# Testicular sperm extraction (TESE) in a patient with impending anorchia

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## ÖZET

*Anorşik hale gelecek bir hastada uygulanan orijinal bir testiküler sperm ekstraksiyonu olgusunu sunuyoruz. Testiküler seminoma bulunan soliter testisten sperm ekstrakte edildi ve donduruldu.*

**Anahtar Kelimeler:** Seminoma, testiküler sperm ekstraksiyonu, intrasitoplazmik sperm enjeksiyonu

## SUMMARY

*This report represents an original case of testicular sperm extraction (TESE) in a patient with impending anorchia. Testicular sperm was retrieved and frozen from the solitary testis with seminoma.*

**Key Words:** Testicular seminoma, infertility, testicular sperm extraction, intracytoplasmic sperm injection

## INTRODUCTION

Intracytoplasmic spermatozoa injection (ICSI) has replaced all other in vitro fertilization techniques since 1992 because of its higher success rates. ICSI procedures were firstly performed using fresh semen of severely oligospermic patients. Subsequently pregnancies were achieved using microsurgical epididymal aspiration

( MESA) in patients with obstructive azospermia and using testicular sperm extraction (TESE) in patients with obstructive and nonobstructive azospermia. Pregnancies were accomplished by obtained using frozen-thawed epididymal, vasal and testicular spermatozoa. (1)

ICSI can be carried out not only in regular infertility cases but some extreme circumstances. We present a case in which fertility became possible by using frozen-thawed testicular and epididymal spermatozoa.

## CASE REPORT

A 37 year old white male presented with infertility secondary to nonobstructive azospermia. He had a history of bilateral orchidopexy due to undescended testes. Thirteen years ago he underwent left radical orchiectomy which demonstrated seminoma. He had a normal solitary vas deferens and nontender mass

adjacent to the caput epididymis. Ultrasound demonstrated two intratesticular masses. Tumor markers were normal.

Scrotal exploration was done using inguinal incision. Intratesticular discrete nodules were palpated intraoperatively. Frozen section diagnosed the nodules as seminoma. High inguinal orchiectomy was completed. Testis was bivalved and multinodular tumor architecture was observed.

Testicular tissue was extracted out of the tumor areas. The epididymis was excised from testis for sperm retrieval. Tissue pieces were put into human tubule fluid. 100 weakly motile spermatozoas were harvested from the testicular and epididymal tissue and were frozen for ICSI. Histopathology confirmed the diagnosis of seminoma. Three oocytes were microinjected, two embryos were transferred but pregnancy was not achieved.

## DISCUSSION

Advances in ICSI provide an opportunity for young infertile men who have solitary testis with azospermia to become a biologic father, even in emergency situation when it is impossible to make a schedule for ICSI. Using with sperm extracted from frozen-thawed testicular tissue for ICSI made pregnancies possible even in nonobstructive azos-

permia. No difference was shown in fertilization, cleavage rates and embryo quality between cryopreserved and fresh testicular sperm.(2)

In previous two cases reported by Novero et al (3)seminomas were discovered incidentally during TESE procedures. Sperms were extracted from the testicular tissue in both cases. Scheduled ICSI procedures resulted in successful fertilization and emb-

ryo transfers. Delivery was achieved in one of the cases.

It is possible to achieve pregnancies using very low numbers of frozen-thawed sperms that was retrieved from testicular tissue. (4) In men with solitary testis, the urologists should consider to retrieve sperm from the genital tract and testis if the patient will lose the testis.

## KAYNAKLAR

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