

Journal of Andrology, Vol 15, Issue 3 266-269, Copyright © 1994 by The American Society of Andrology

## JOURNAL ARTICLE

# Semen of spinal cord injured men freezes reliably

O. F. Padron, N. L. Brackett, M. S. Weizman and C. M. Lynne  
Department of Urology, University of Miami School of Medicine, Florida.

The objectives of the present study were to: 1) determine the effect of cryopreservation on the percent and the grade of motility of sperm from spinal cord injured (SCI) men and 2) determine which method of freezing yields the best post-thaw motility in sperm from SCI men. Antegrade semen samples were obtained from 9 SCI subjects and 10 age-matched healthy control subjects. Motility in fresh samples was determined and cryopreservative medium was added to each sample.

Aliquots of each sample were frozen according to three methods: 1) liquid nitrogen vapor only (V); 2) vapor for 12 minutes followed by submersion into liquid nitrogen (V+N<sub>2</sub>); and 3) direct submersion into liquid nitrogen (N<sub>2</sub>). Samples were frozen for 1 week, then thawed. The post-thaw percent and grade of motility was determined. The mean percent motility of fresh samples for SCI subjects (21.0%) was significantly lower than for control subjects (55.7%).

After thawing, the mean percent drop in motility for V, V+N<sub>2</sub>, and N<sub>2</sub> for controls was 65.2%, 73.5%, and 79.4%, respectively, and for SCI subjects, it was 64.7%, 74.5%, and 81.6%, respectively. There was no statistically significant difference between control and SCI subjects by method of freezing.

Vapor only as a freezing method was superior to all other methods for retention of sperm motility in both control and SCI subjects. We conclude that the semen of SCI men may be frozen reliably and that their sperm retain motility similar to that of normal men. Vapor only, being the most gentle method used, gives the best recovery of sperm motility in either group.

This article has been cited by other articles:



### HUMAN REPRODUCTION

[HOME](#)

Y. Hovav, H. Yaffe, B. Zentner, M. Dan-Goor, and M. Almagor  
The use of ICSI with fresh and cryopreserved electroejaculates from psychogenic anejaculatory men  
Hum. Reprod., February 1, 2002; 17(2): 390 - 392.

[\[Abstract\]](#) [\[Full Text\]](#) [\[PDF\]](#)

### This Article

- ▶ [Full Text \(PDF\)](#)
- ▶ [Alert me when this article is cited](#)
- ▶ [Alert me if a correction is posted](#)

### Services

- ▶ [Similar articles in this journal](#)
- ▶ [Similar articles in PubMed](#)
- ▶ [Alert me to new issues of the journal](#)
- ▶ [Download to citation manager](#)

### Citing Articles

- ▶ [Citing Articles via HighWire](#)
- ▶ [Citing Articles via Google Scholar](#)

### Google Scholar

- ▶ [Articles by Padron, O. F.](#)
- ▶ [Articles by Lynne, C. M.](#)
- ▶ [Search for Related Content](#)

### PubMed

- ▶ [PubMed Citation](#)
- ▶ [Articles by Padron, O. F.](#)
- ▶ [Articles by Lynne, C. M.](#)

