FEEDBACK SUBSCRIPTIONS ARCHIVE SEARCH TABLE OF CONTENT

Journal of Andrology, Vol 20, Issue 2 214-219, Copyright © 1999 by The American Society of Andrology

CITATIONS INTO A CITATION MANAGER

JOURNAL ARTICLE

Journal of

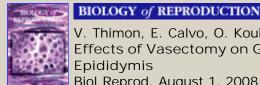
Some vasovasostomized men are characterized by low levels of P34H, an epididymal sperm protein

C. Guillemette, M. Thabet, L. Dompierre and R. Sullivan Centre de Recherche en Biologie de la Reproduction and Departement d'Obstetrique-Gynecologie, Faculte de Medecine, Universite Laval, Ste-Foy, PQ, Canada.

During epididymal transit, sperm surface proteins involved in the fertilization process can be added or modified. P34H, a human epididymal-sperm protein, is proposed to be involved in the interactions between spermatozoa and the zona pellucida. We have previously demonstrated that P34H is present in men of proven

fertility and is absent in 50% of men presenting with idiopathic infertility. Spermatozoa with a low amount of P34H exhibit a dramatic reduction in their ability to interact with zona pellucida. Even if the surgical success of vasectomy reversal is high, fertility is not always reestablished, possibly due to epididymal damage caused by vasectomy. In this study, western blot analyses were performed to determine the level of P34H present on spermatozoa of men who underwent vasectomy reversal. Spermatozoa obtained from different semen samples from a given individual had similar P34H levels; however, samples from different men were highly variable. When quantified by densitometric scanning, P34H levels from vasovasostomized men varied between 1.5% and 149% compared with that from a fertile donor who represented 100%. Eighteen of 25 vasovasostomized men had a P34H level lower than 30% of the normal value, while the remaining 7 males were in the normal range. Furthermore, the population of vasovasostomized men with P34H levels lower than 30% was significantly different from the control group of 19 fertile men. The high variation of P34H levels observed in vasovasostomized men did not correlate with the spermiogram values (P > 0.05). An important factor in determining sperm P34H level appears to be the period of time elapsed between the vasectomy and vasovasostomy. In summary, our results show that the P34H level varied from one man to another and that low levels of the epididymal sperm protein is associated with vasectomy reversal.

This article has been cited by other articles:



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

- Articles by Guillemette, C.
- Articles by Sullivan, R.
- Search for Related Content

PubMed

- PubMed Citation
- Articles by Guillemette, C.
- Articles by Sullivan, R.

HOME



Molecular Human Reproduction

C. Legare, M. Thabet, J.-L. Gatti, and R. Sullivan HE1/NPC2 status in human reproductive tract and ejaculated spermatozoa: consequence of vasectomy Mol. Hum. Reprod., July 1, 2006; 12(7): 461 - 468. [Abstract] [Full Text] [PDF]



Journal of ANDROLOGY

F. Saez, C. Legare, J. Laflamme, and R. Sullivan Vasectomy-Dependent Dysregulation of a Local Renin-Angiotensin System in the Epididymis of the Cynomolgus Monkey (Macaca fascicularis) J Androl, September 1, 2004; 25(5): 784 - 796. [Abstract] [Full Text] [PDF]



Journal of ANDROLOGY

C. Legare, N. Verville, and R. Sullivan Vasectomy Influences Expression of HE1 but not HE2 and HE5 Genes in Human Epididymis J Androl, January 1, 2004; 25(1): 30 - 43. [Abstract] [Full Text] [PDF]



Journal of ANDROLOGY

S. A. Joshi, S. A. Ranpura, S. A. Khan, and V. V. Khole Monoclonal Antibodies to Epididymis-specific Proteins Using Mice Rendered Immune Tolerant to Testicular Proteins J Androl, July 1, 2003; 24(4): 524 - 533. [Abstract] [Full Text] [PDF]

BIOLOGY of REPRODUCTION

K. Doiron, C. Legare, F. Saez, and R. Sullivan Effect of Vasectomy on Gene Expression in the Epididymis of Cynomolgus Monkey Biol Reprod, March 1, 2003; 68(3): 781 - 788. [Abstract] [Full Text] [PDF]



Journal of ANDROLOGY

S. Andonian, K. Jarvi, A. Zini, and L. Hermo Ultrastructural Features of the Vas Deferens From Patients Undergoing Vasectomy and Vasectomy Reversal J Androl, September 1, 2002; 23(5): 691 - 701. [Abstract] [Full Text] [PDF]



Bull

G. Frenette, C. Lessard, and R. Sullivan Selected Proteins of "Prostasome-Like Particles" from Epididymal Cauda Fluid Are Transferred to Epididymal Caput Spermatozoa in

Biol Reprod, July 1, 2002; 67(1): 308 - 313. [Abstract] [Full Text] [PDF]

HOME

НОМЕ

НОМЕ

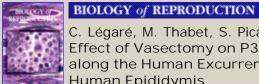
номе

НОМЕ

HOME

HOME

HOME



C. Légaré, M. Thabet, S. Picard, and R. Sullivan Effect of Vasectomy on P34H Messenger Ribonucleic Acid Expression along the Human Excurrent Duct: A Reflection on the Function of the Human Epididymis Biol Reprod, February 1, 2001; 64(2): 720 - 727. [Abstract] [Full Text]

HOME HELP FEEDBACK SUBSCRIPTIONS ARCHIVE SEARCH TABLE OF CONTENTS

Copyright © 1999 by The American Society of Andrology.