

Accepted Manuscript

Title: Spermatogenesis in Humans and its affecting factors

Author: Filipe Tenorio Lira Neto Phil Vu Bach Bobby B.
Najari Philip S. Li Marc Goldstein



PII: S1084-9521(16)30104-5
DOI: <http://dx.doi.org/doi:10.1016/j.semcdb.2016.04.009>
Reference: YSCDB 2014

To appear in: *Seminars in Cell & Developmental Biology*

Received date: 11-2-2016
Revised date: 13-4-2016
Accepted date: 15-4-2016

Please cite this article as: Neto Filipe Tenorio Lira, Bach Phil Vu, Najari Bobby B, Li Philip S, Goldstein Marc. Spermatogenesis in Humans and its affecting factors. *Seminars in Cell and Developmental Biology* <http://dx.doi.org/10.1016/j.semcdb.2016.04.009>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Spermatogenesis in Humans and Its affecting factors

Filipe Tenorio Lira Neto, MD

Center for Male Reproductive Medicine and Microsurgery, Department of Urology and Institute of Reproductive Medicine, Weill Cornell Medical College, New York, New York

Phil Vu Bach, MD

Center for Male Reproductive Medicine and Microsurgery, Department of Urology and Institute of Reproductive Medicine, Weill Cornell Medical College, New York, New York

Bobby B Najari, MD

Center for Male Reproductive Medicine and Microsurgery, Department of Urology and Institute of Reproductive Medicine, Weill Cornell Medical College, New York, New York

Philip S Li, MD

Center for Male Reproductive Medicine and Microsurgery, Department of Urology and Institute of Reproductive Medicine, Weill Cornell Medical College, New York, New York

Marc Goldstein, MD

Center for Male Reproductive Medicine and Microsurgery, Department of Urology and Institute of Reproductive Medicine, Weill Cornell Medical College, New York, New York

Abstract

Spermatogenesis is an extraordinary complex process. The differentiation of spermatogonia into spermatozoa requires the participation of several cell types, hormones, paracrine factors, genes and epigenetic regulators. Recent researches in animals and humans have furthered our understanding of the male gamete differentiation, and led to clinical tools for the better management of male infertility. There is still much to be learned about this intricate process. In this review, the critical steps of human spermatogenesis are discussed together with its main affecting factors.

Keywords: spermatogenesis, sperm, reproduction, infertility, genetics, testis, testosterone, varicocele

Download English Version:

<https://daneshyari.com/en/article/5534966>

Download Persian Version:

<https://daneshyari.com/article/5534966>

[Daneshyari.com](https://daneshyari.com)