

Journal of Andrology, Vol 12, Issue 4 240-243, Copyright © 1991 by The American Society of Andrology

JOURNAL ARTICLE

Mitosis in normal adult guinea pig Leydig cells

S. M. Mendis-Handagama

Department of Population Dynamics, Johns Hopkins School of Hygiene and Public Health, Baltimore, Maryland 21205.

In this study, Leydig cells in mitosis in adult guinea pigs were quantified. Testes of adult control guinea pigs (n = 10) were fixed by whole body perfusion with 2.5% glutaraldehyde in cacodylate buffer, postfixed in a mixture of osmium tetroxide-potassium ferrocyanide, and embedded in Epon Araldite for qualitative and quantitative microscopy. Using stereologic techniques, the total number of Leydig cells per testis and the number of dividing Leydig cells per testis were quantified. Light microscopic studies revealed the presence of dividing Leydig cells. Ultrastructural studies on a few of these Leydig cells showed that they contained abundant smooth endoplasmic reticulum and mitochondria, which further supported this identity. The total number of Leydig cells per testis and the number of dividing Leydig cells per testis were determined as 14.1×10^6 (standard error [SE] = 0.33) and 8×10^3 (SE = 5), respectively. These results indicate that Leydig cells undergo mitosis at a rate of 1 per 1.75×10^4 in adult guinea pigs.

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

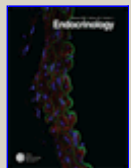
- ▶ [Citing Articles via HighWire](#)
- ▶ [Citing Articles via Google Scholar](#)

Google Scholar

- ▶ [Articles by Mendis-Handagama, S. M.](#)
- ▶ [Search for Related Content](#)

PubMed

- ▶ [PubMed Citation](#)
- ▶ [Articles by Mendis-Handagama, S. M.](#)



Endocrinology

▶ HOME

R.-s. Ge and M. P. Hardy
Decreased Cyclin A2 and Increased Cyclin G1 Levels Coincide with Loss of Proliferative Capacity in Rat Leydig Cells During Pubertal Development

Endocrinology, September 1, 1997; 138(9): 3719 - 3726.

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