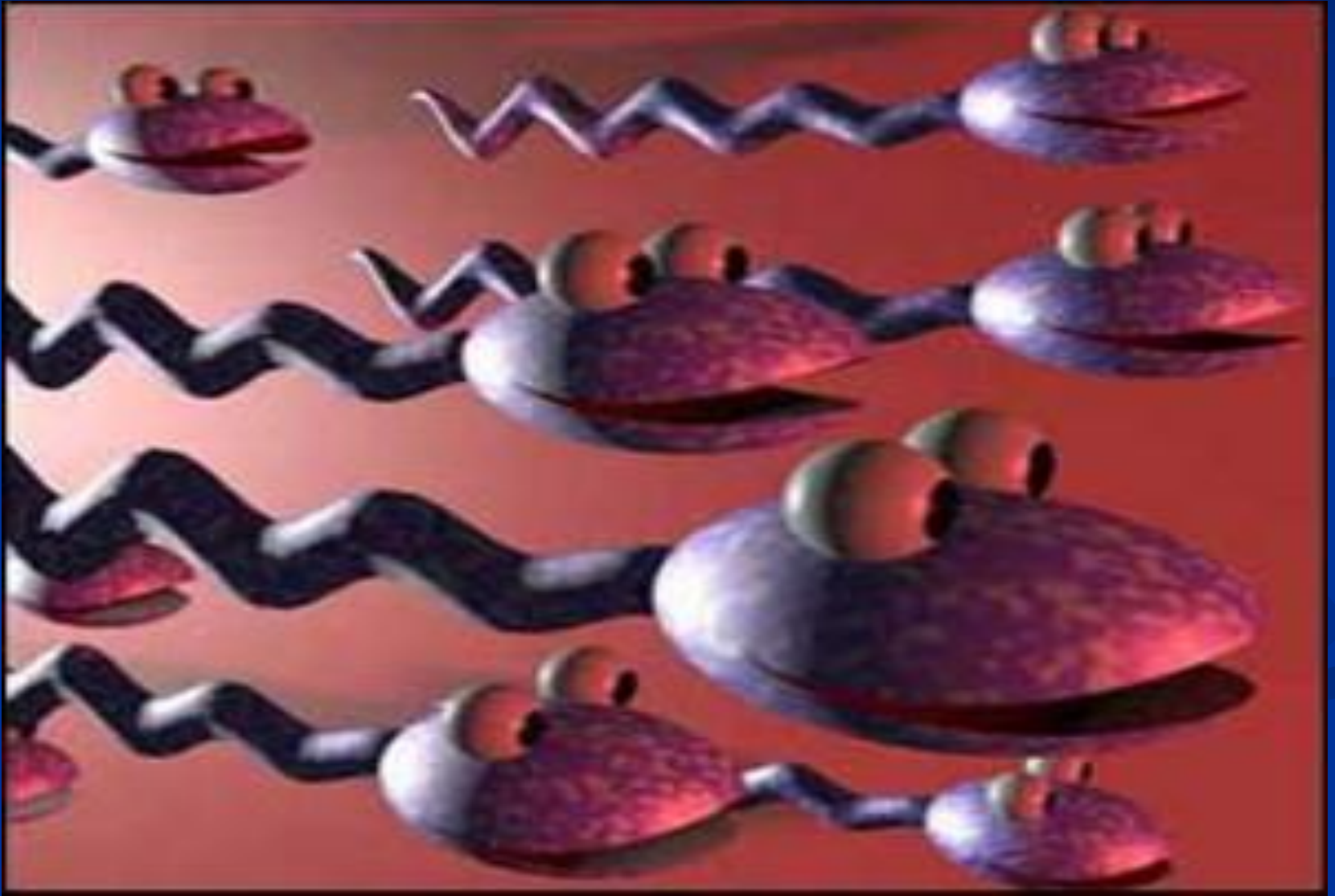
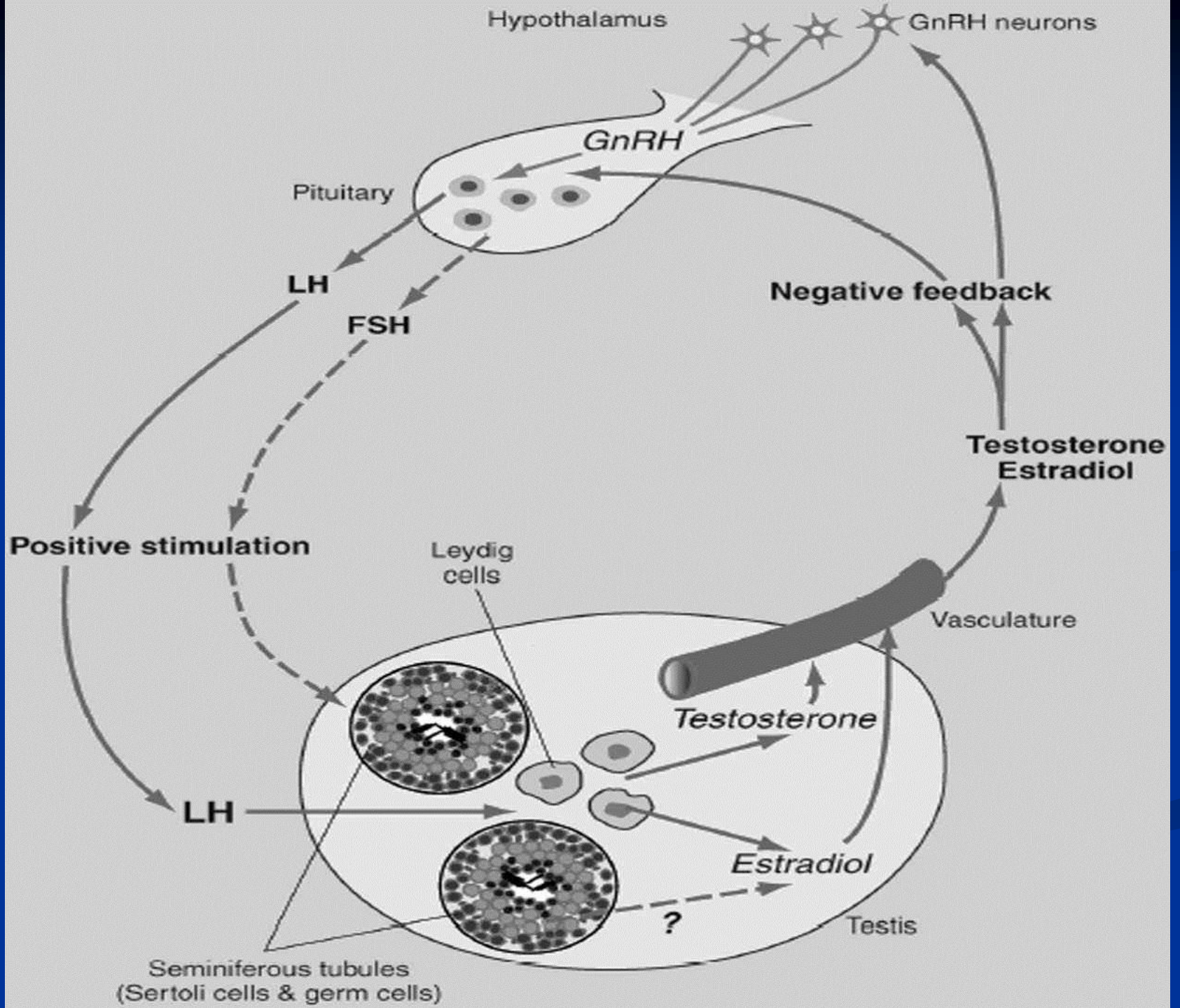


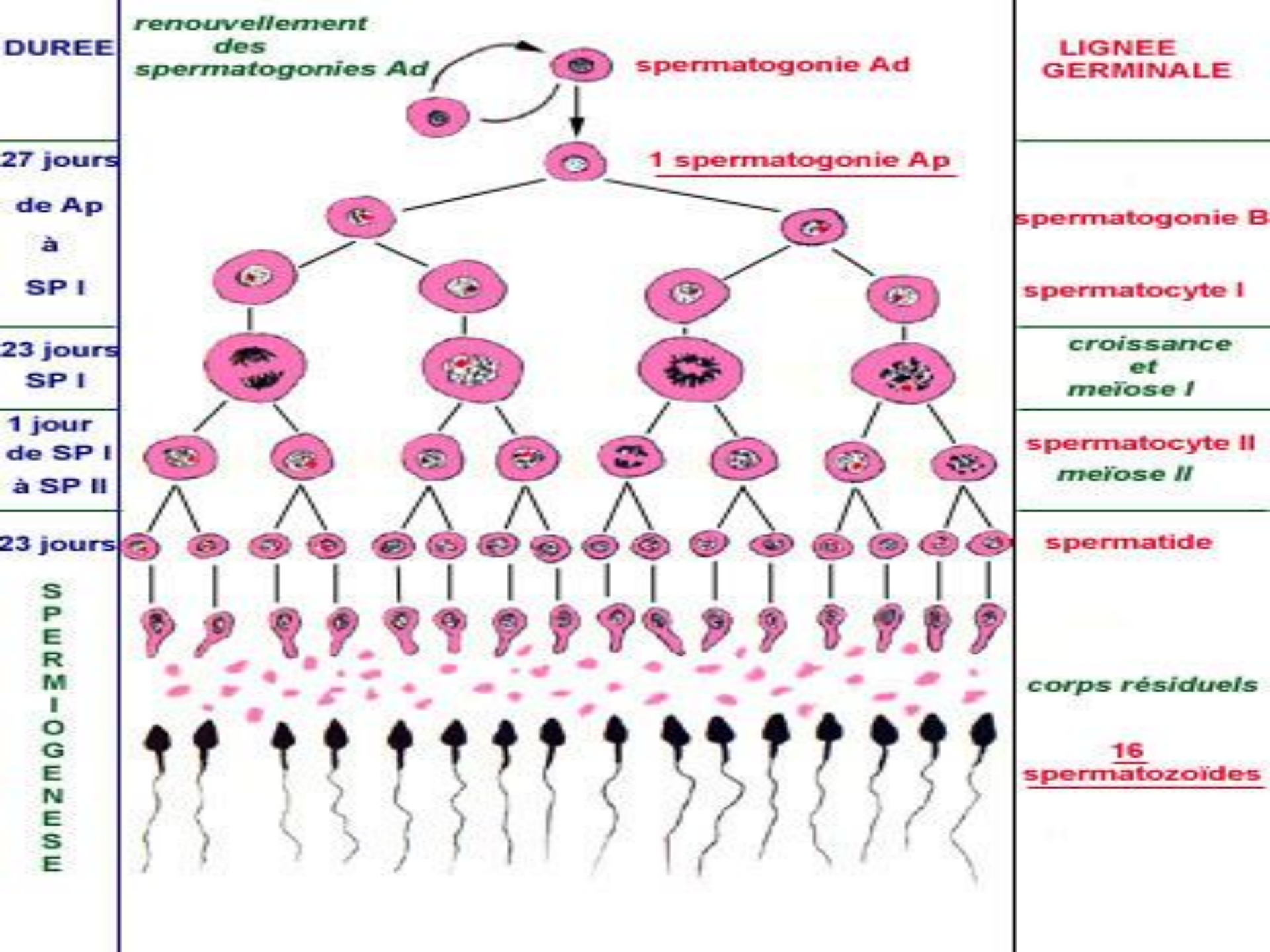
Male factor infertility

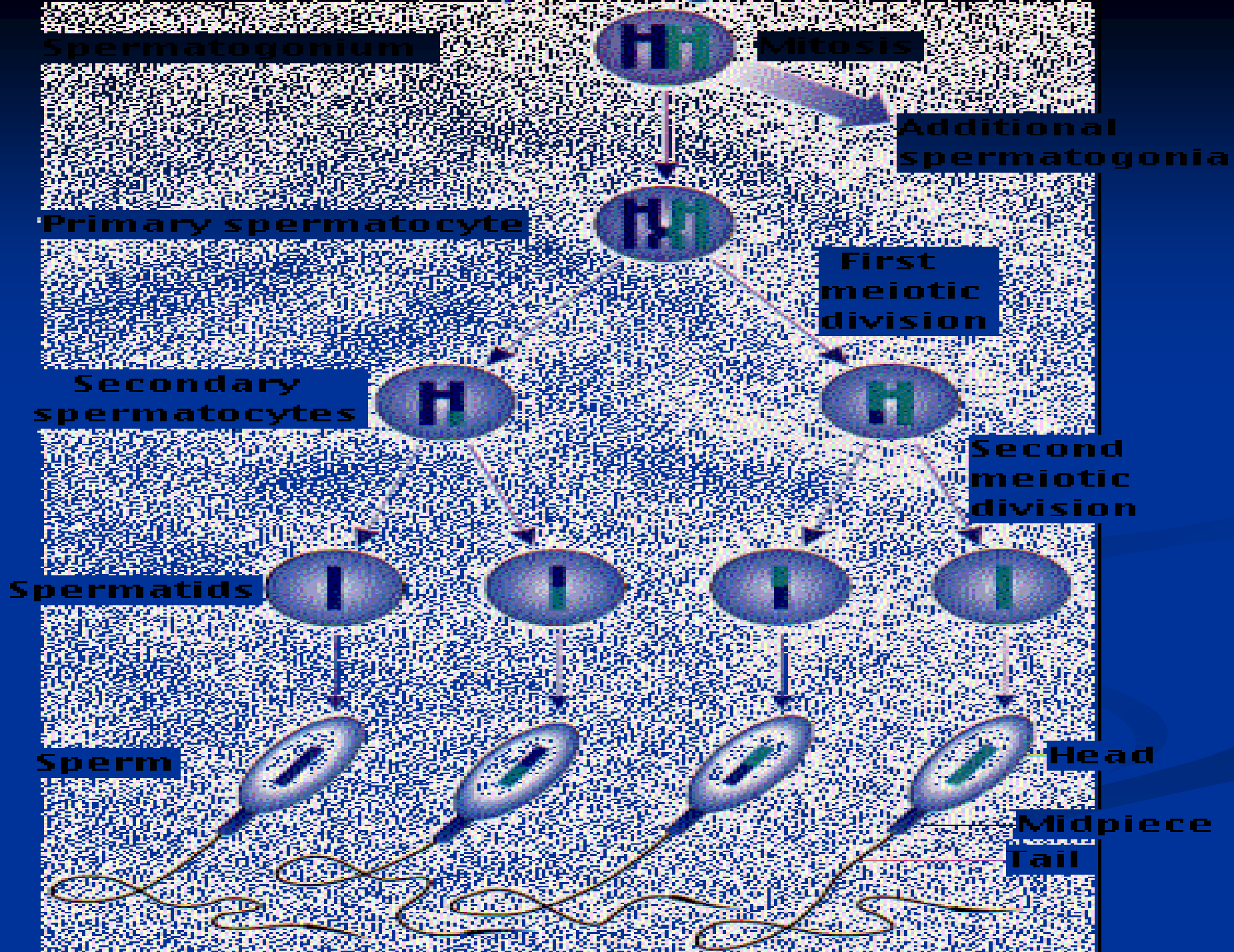


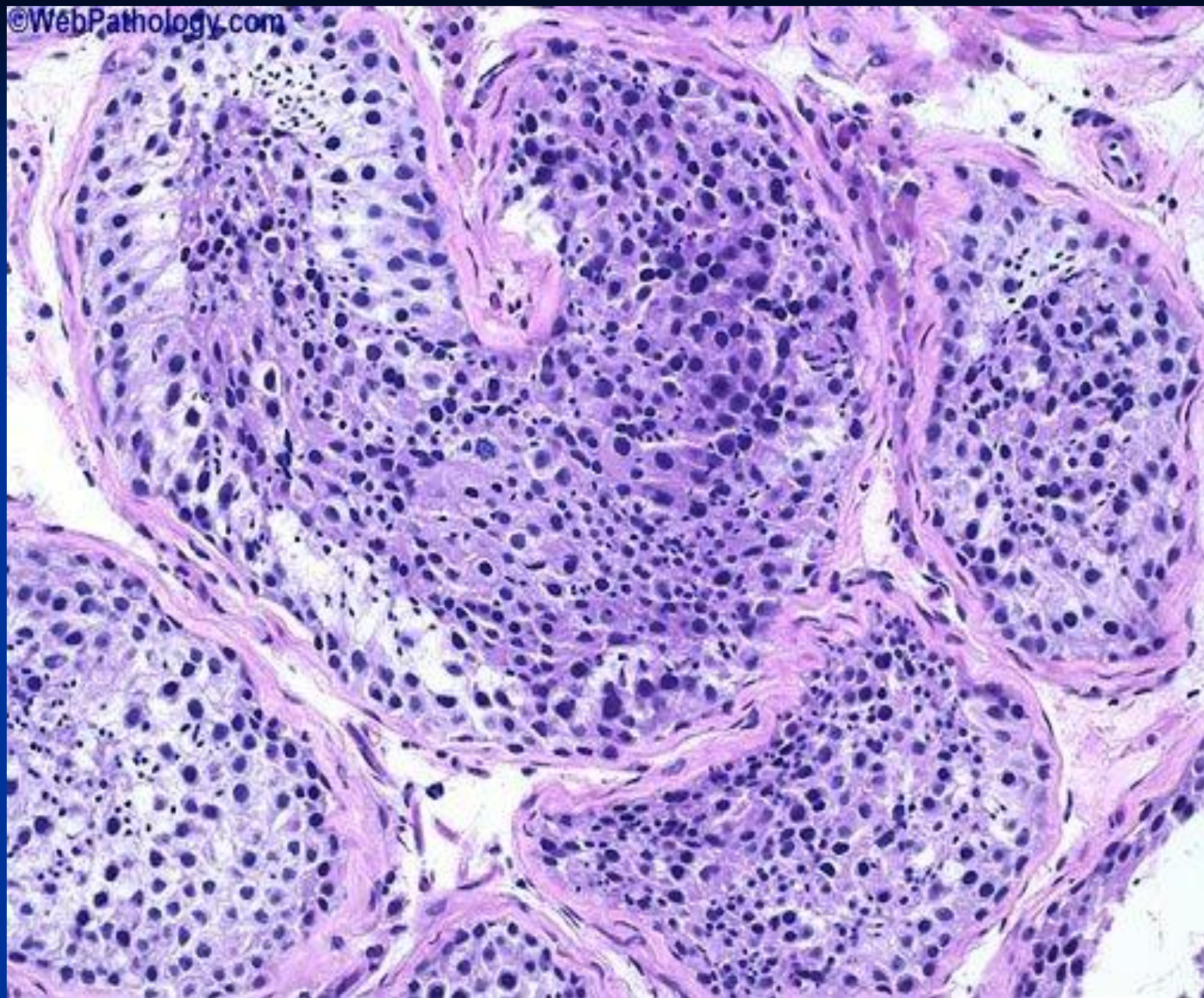
- Male factor infertility implies a lack of sufficient numbers of competent sperm, resulting in failure to fertilize the normal ovum.
- It is directly responsible for 35% of cases of infertility

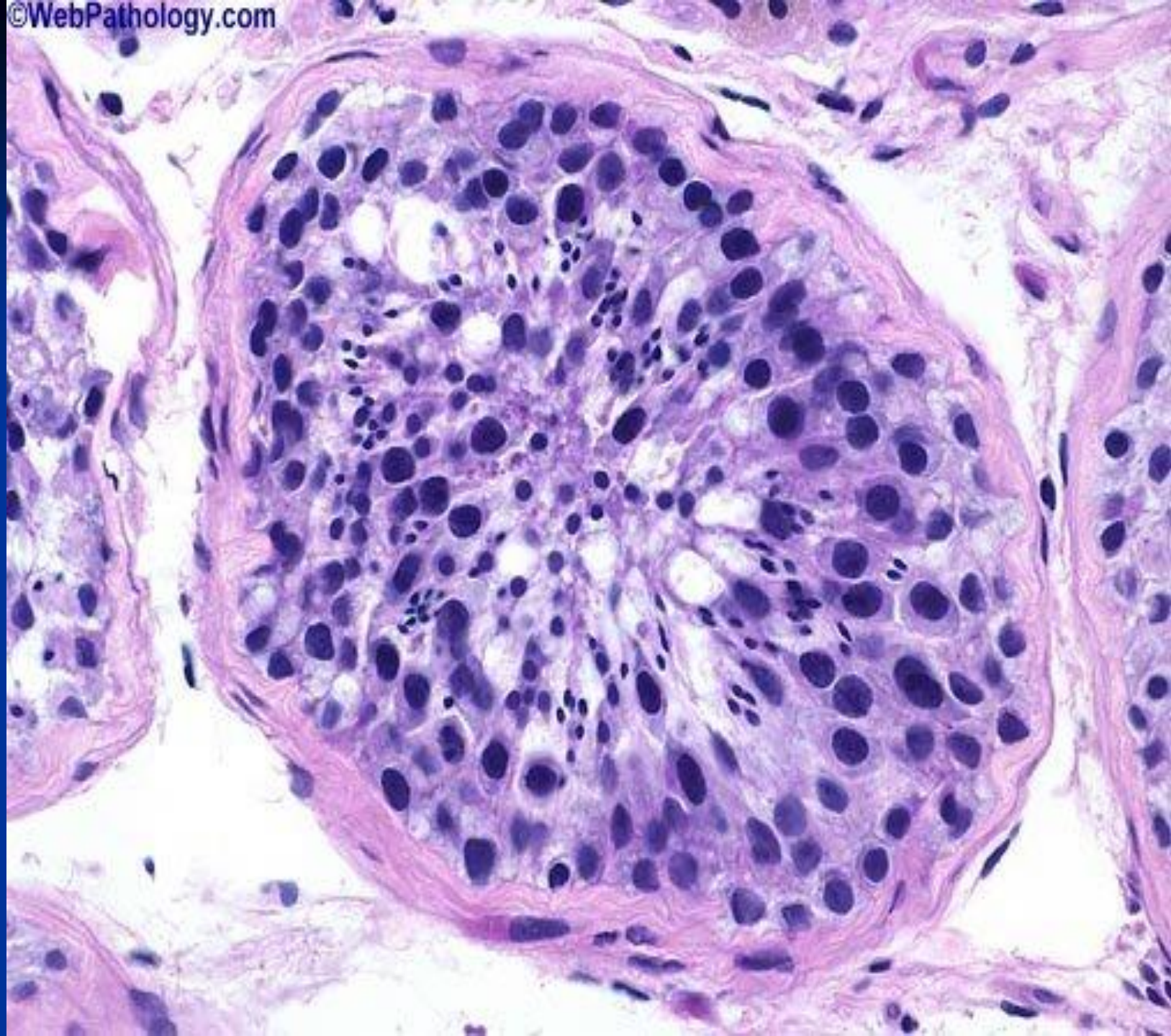


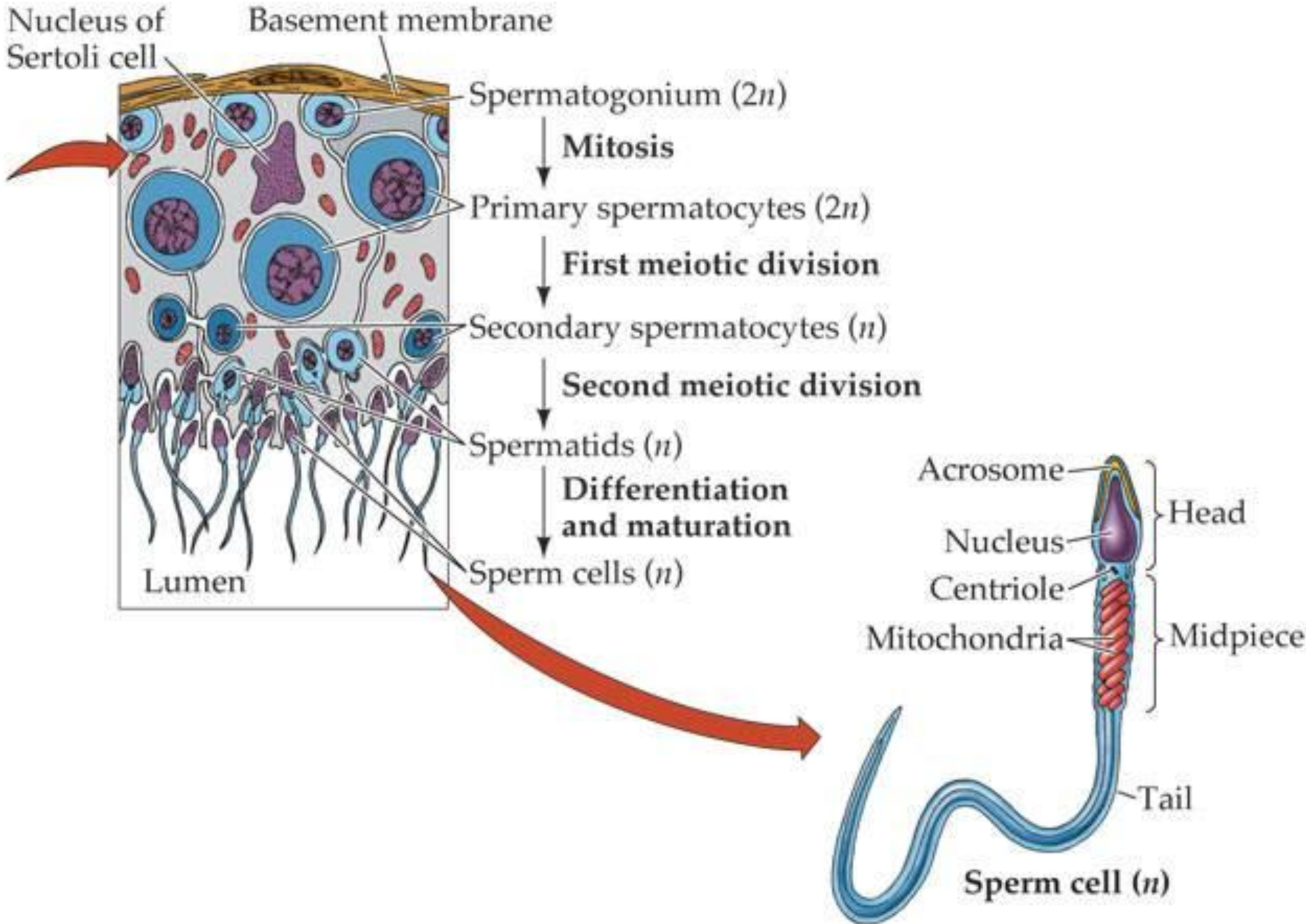












LIFE: THE SCIENCE OF BIOLOGY, Seventh Edition, Figure 43.9 Seminiferous Tubules Are the Site of Spermatogenesis (Part 2)
 © 2004 Sinauer Associates, Inc. and W. H. Freeman & Co.

Causes of male infertility:

- Disorders of spermatogenesis
- Impaired Sperm transport:
- Ejaculatory dysfunction
- Other causes:

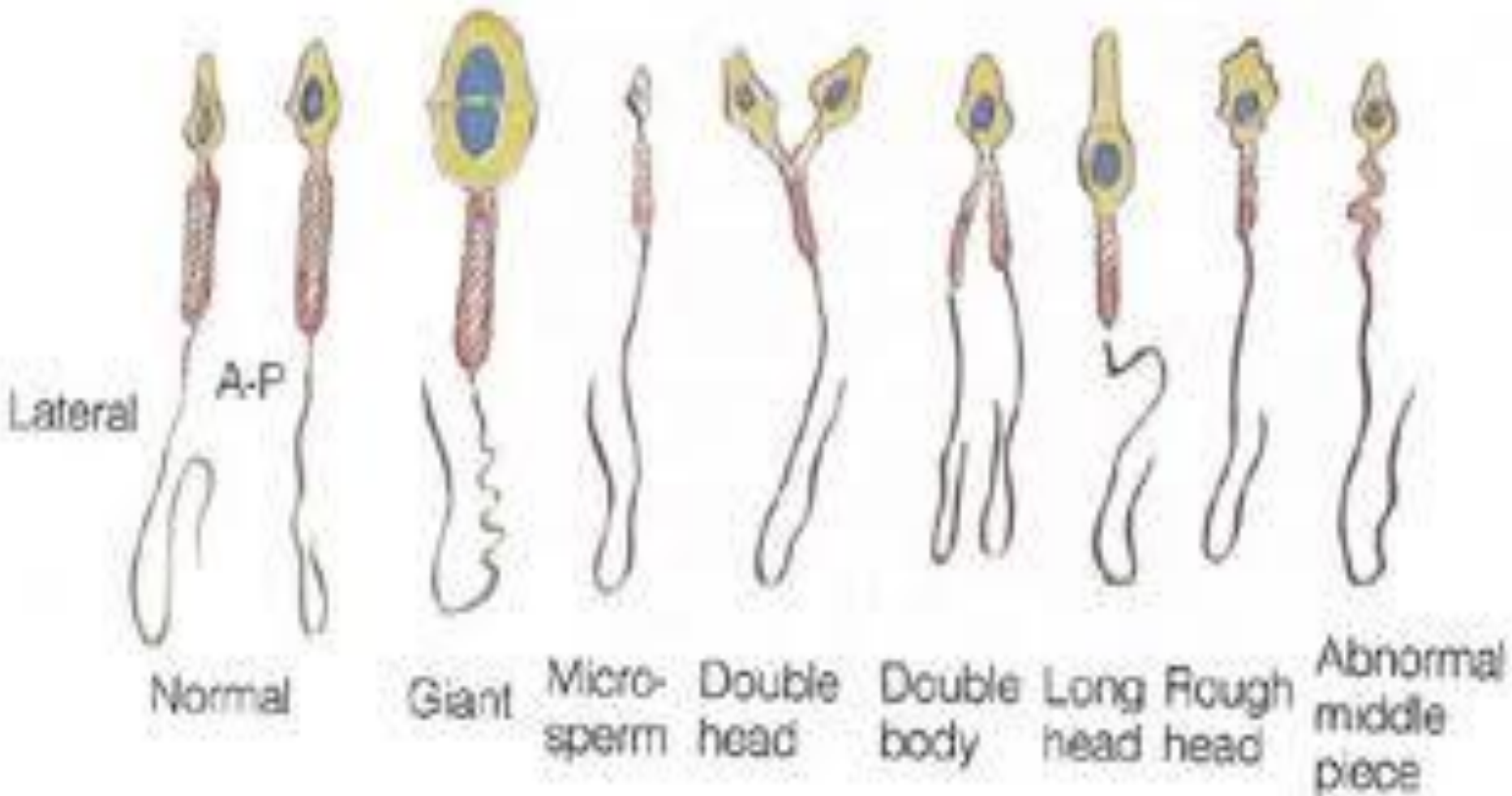
Immunological factors such, as antisperm antibodies (IgG or IgA) and general infections may affect sperm function and lead to infertility.

Seminal Fluid Analysis:

The World Health Organization (WHO) has proposed a set of criteria for normal semen parameters:

- Volume: 2-5 mL
- Liquifaction time: within 30 minutes
- Sperm concentration: ≥ 20 million/mL
- Sperm motility: $>50\%$ progressive motility
- Sperm morphology: $>30\%$ normal forms
- White blood cells: <1 million/mL





Lateral

A-P

Normal

Giant

Micro-sperm

Double head

Double body

Long head

Rough head

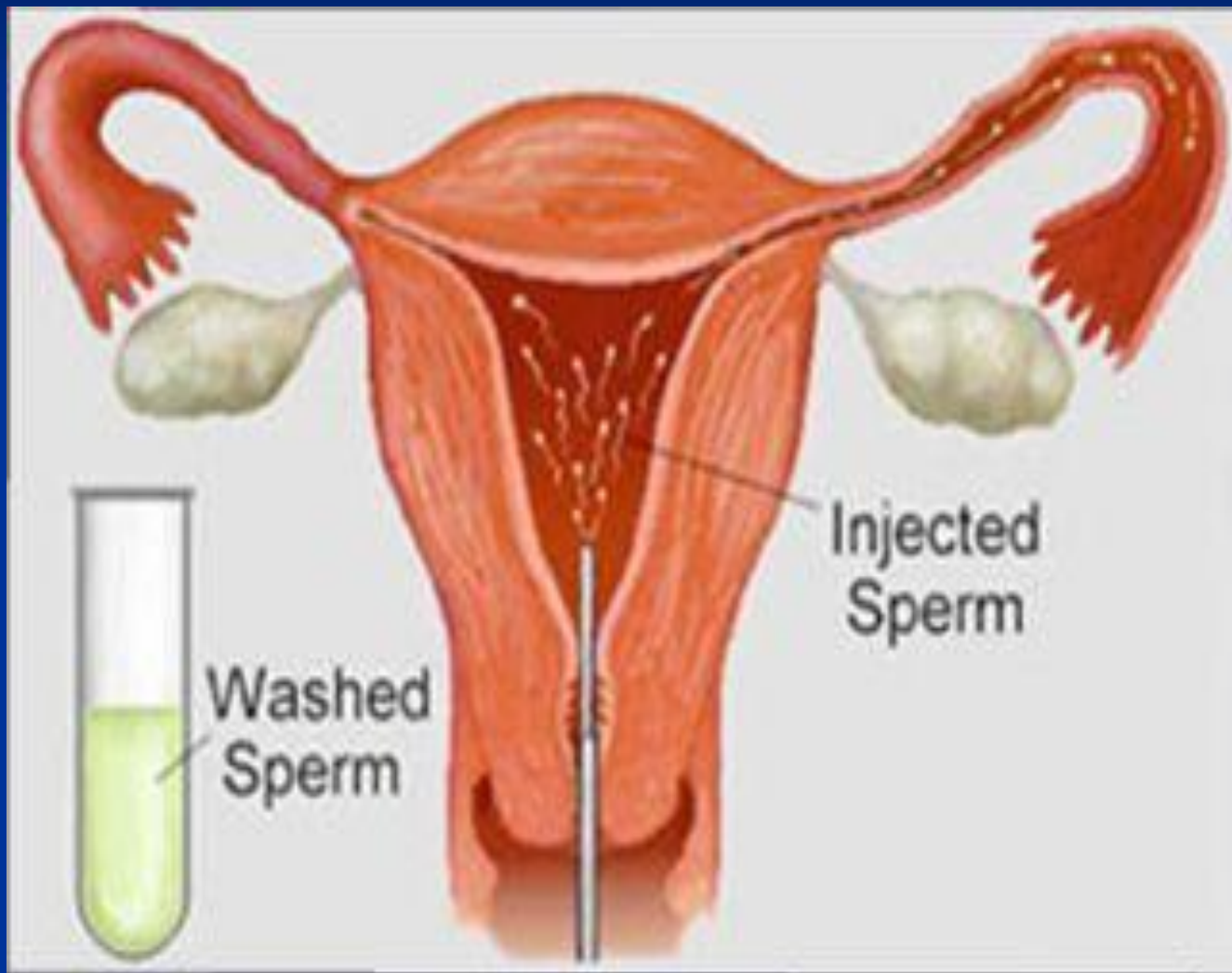
Abnormal middle piece

Further investigations of male infertility:

- Endocrine tests: FSH, LH, Testosterone, Prolactin
- CHROMOSOMAL AND GENETIC STUDIES
- MICROBIOLOGY OF SEMEN:
- IMAGING OF THE MALE GENITAL TRACT:
- TESTICULAR BIOPSY
- ANTISPERM ANTIBODIES

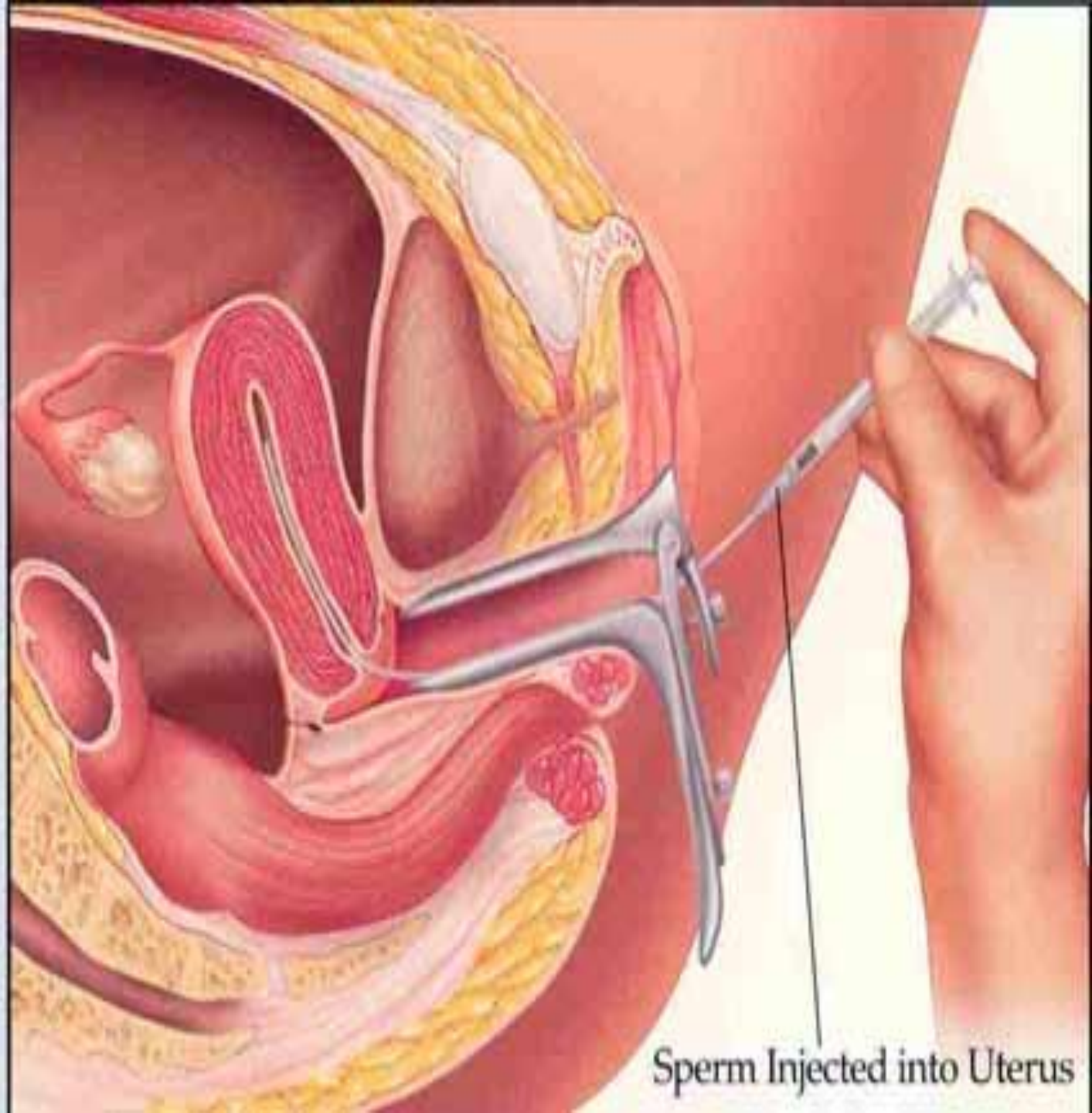
Management of male factor infertility

- **Intrauterine insemination (IUI):** using washed sperm with or without controlled ovarian stimulation considered in cases where semen parameters show mild or moderate abnormalities.
- **In Vitro Fertilization/ Intracytoplasmic Sperm Injection IVF/ICSI**





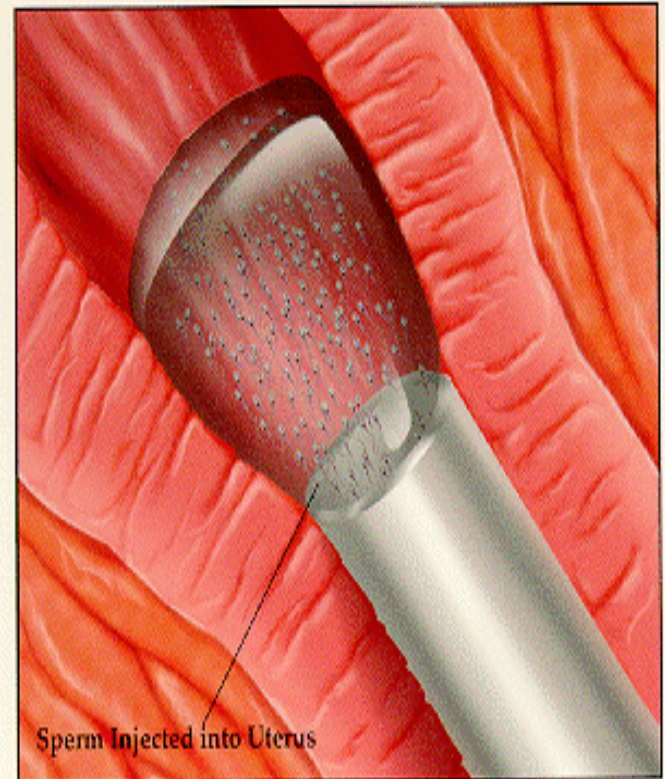
Sperm in Sterile
Medium



Sperm Injected into Uterus



IUI Procedure



Sperm Injected into Uterus

Through the process of IUI, sperm are placed high in the female reproductive tract to enhance the chance of successful fertilization.

Conventional treatment for male infertility:

- **GONADOTROPHINS:** Hypogonadotropic hypogonadism responds to gonadotrophin treatment. Administration of FSH and hCG is effective in achieving an acceptable sperm count in 80% of men
- **SURGICAL TREATMENT**
- **EJACULATORY FAILURE:**
 - Sildenafil: erectile dysfunction
 - Alpha-agonists and anticholinergic drugs: retrograde ejaculation