o Spermatogenesis can be divided into four (4) stages: 3.1.o Spermatogonia Ad represent the first cellular stage of spermatogenesis itself, it divides into 2 Spermatogonia B. o Spermatogonia B differentiate into 2 Spermatocyte type I. o The multiplication and differentiation of these cells is regulated by the tyrosine kinase receptor (cKIT) protein.o Spermiogenesis includes 6 fundamental phenomena which are practically simultaneous: a. Formation of the acrosome from the Golgi apparatus: Acrosomic granule is produced in the Golgi apparatus and grows over the nucleus.The molecular mechanism is still poorly understood yet, it is dependent on FSH and testosterone.f.Spermiation: is the final process during which mature spermatozoa are delivered into the lumen of Seminiferous Tubules for their subsequent maturation in the epididymis.o Spermatozoa is pushed out into the tubule lumen via the extension of a microtubule-rich Sertoli cell cytoplasmic stalk (tige cytoplasmique).The microtubules of the distal centriole elongate and organize into an axoneme that elongates and emerges from the cell by pushing back the plasma membrane.e.Removal of cytoplasm: detachment of the cytoplasm forming the residual body, which is subsequently digested by Sertoli cells via phagocytosis.Proliferation (multiplication, Spermatocytogenesis) o Two types of spermatogonia A (spermatogonium) are present in the basal compartment of the ST, Spermatogonia Ad (dark type) and Ap (pale type).o This process involves two successive meiotic divisions: meiosis I and meiosis II. o During meiosis I (23 days), diplotene Spermatocyte I (2N:2C) is transformed into 2 Spermatocyte II (1N:2C).Maturation (Meiosis) o The transition from diploid primary spermatocytes to haploid spermatids.3.3.3.3.