Testicular atrophy

Atrophy of the testes can be seen in old age as the endostage of orchitis of various etiology in cryptorchidism, as well as in endocrine abnormal ities ,in malnutrition , following irradiation or after treatment with antineoplastic drugs. Testicular atrophy is always associated with reduced fertility .in the study of male infertility ,beside cytologic examination of ejaculate ,testicular biopsy is an important sources of information .

Gross finding:-

The atrophic testis is always smaller than normal. Its capsule ,the tunica albuginea, is gray to white ,some what thickened an wrinkled.

Microscpic finiding.

The germ cell population in the seminiferous tubules is significantly reduced in number, spermatogenesis is markedly diminish. In marked atrophy only few spermatogonia, large cell with spherical nuclei and the supporting sertoli cells with the base of their triangular body on the basement membrane are lining the seminiferous tubules .Due to fibrosis of the semiinferous tubules.Due to fibrosis of the tubular basement membrane the wall of the seminiferous tubules is thickened hyalinized and homogeneously eosinophilic. The lumen of some tubules may be completely oblite rate by fibrous hyalin connective tissue .The interstitium is markedly increase and is rich in connective tissue fibers.some atrophic tubules are surrounded by rings of connective tissue fibers(peritubular fibrosis)concomitant with the increase of connective tissue there is aproliferation of intersitial leyding cells.