

The microscopical characters of an undescended testis are thus described by Mr. McAdam Eccles ("The Imperfectly Descended Testis," p. 17): "The seminiferous tubules, or what should be seminiferous, are smaller, more widely separated from one another by the interstitial tissue, and are fewer in number, and probably shorter in length, than those of the normal organ. Between the tubules themselves there is much loose connective tissue, which is rich in blood-vessels, in spite of the otherwise ill-development of the gland. Scattered throughout this tissue there are nuclei, belonging almost certainly to peculiar interstitial stroma cells. In some sections these appear to have undergone considerable development, both in number and size. What their function and significance may be is still problematical. Possibly they are associated with an internal secretion of the organ, a secretion which may be needful for the full development of the male characteristics, and the fact that they are present so uniformly and in proportionately such large numbers in the imperfectly descended testis may point to the fact that they are peculiarly necessary for this purpose in the absence of spermatozoa-producing tubule cells. The basement membrane of the abortive tubules is well developed, but the lumen is filled with a mass of granular *débris*, containing a large number of nuclei of various shapes and sizes, these being probably derived from the cells lining the tubule. Neither spermatoblasts nor spermatozoa can be demonstrated in the tubules of by far the larger number of imperfectly descended testes."

In rare cases the spermatogenic function is not lost, even when there is double imperfect descent with very small testes, or when both organs are arrested within the abdominal cavity; this has been proved, both by the presence of normal tubules and active spermatozoa, on histological examination, and also by the fact that these persons have proved to be capable of procreation.*

The relation between imperfect descent and imperfect

* Many examples of this are recorded in medical literature. There is, however, evidence that those in which spermatogenesis is normally carried out are young men mostly under thirty years of age. In men over this age the imperfectly descended organ is nearly always functionless. In the majority of cases under the age of thirty the spermatogenic function is absent, and the proportion of functional organs is probably small.