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IMPERFECT TRANSITION OF THE
TESTIS, WITH NOTES OF AN
UNUSUAL CASE.*

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Mr. President and Gentlemen,—The testicles lie in the lumbar region of the abdominal cavity until the sixth month of foetal life is completed; they are there in close relation to the kidney, and are suspended in position by a fold of peritoneum—the mesorchium. During the last three months of foetal development, the relations of the testicles become altered, and these organs are gradually transferred from the abdominal cavity into the scrotum—one testicle is usually in the scrotum during the eighth month, and they are both found in that position during the ninth month, *i.e.*, at full term. The cause and mechanism of the descent of the testicle has afforded a subject for much discussion.

The testicle may be retained or its descent delayed. It has been stated† that the gland is delayed in its descent until the first year after birth in 1 in 5 infants. Sir Astley Cooper has often seen the gland descend between the ages of 13 and 17, sometimes 21. If it does not descend before puberty, it rarely descends after. Humphrey has recorded a case in which testicle

descended at the age of 40, and Fenwick reported a case before the Medical Society of London in which the gland descended into the scrotum, at the age of 49.*

The testicle, as it lies in its normal position, has certain coverings which surround it in the scrotum. The fundibuliform fascia can be traced upwards, and is found to be continuous with the transversalis fascia of the abdomen, while the spermatic fascia is a prolongation from the intercolumnar fascia on the surface of the external oblique. Between these, the cremasteric fascia envelopes the cord and its coverings; the muscular loops of the cremasteric fascia are continuous with the fibres of the internal oblique muscle. The most important covering for us to consider in the present connection is the tunica vaginalis. The peritoneal pouch, known as the processus vaginalis, descends into the scrotum in advance of the testicle. It is impossible that the peritoneal protrusion is formed by the advancing testicle, because it can be plainly demonstrated that the processus vaginalis exists whilst the testicle is still in the abdomen. It is the advancing peritoneal pouch which carries before it the coverings derived from the abdominal parietes, which ultimately surround the testicle in the scrotum.

At the fifth week of intra-uterine life, the rudimentary testicle and the Wolffian body lie at the lower and outer part of the kidney; as development proceeds the kidney ascends, and the testicle attains a position between the lower

* Read before the Toronto Medical Society.

† Holmes' System of Surgery, Am. ed., vol. ii, p. 894.

* *Lancet*, Dec. 12, 1885, p. 1,096.