SOME OF THE COMMON DISEASES OF THE FEMALE URETHRA.

CLINICAL LECTURE DELIVERED AT CHARING CROSS HOSPITAL TO THE POST-GRADUATE CLASS.

BY AMAND ROUTH, M.D., B.S.,

Obstetric Physician, with Care of Out-Patients, Charing Cross Hospital; Physician to the Samaritan Free Hospital for Women, London.

WHILST many of the causes of painful and difficult micturition in women are of reflex origin, due to uterine or ovarian displacements, uterine or peri-uterine inflammation, renal calculus, and so on, there is quite a variety of vesical and urethral diseases, which, owing to the difficulty of making a definite diagnosis, are very apt to be ignored. To-day I propose to discuss briefly a few of the commoner diseases of the female urethra, which is usually supposed to be prone to few troubles as compared with the male urethra, owing to its relatively shorter length, greater diameter, and simplicity.

On the board I have drawn out a list of urethral diseases, and some of them will form the subject of to-day's lecture.

- Malformations . . . { Absence—complete or partial. / Atresia.
- Functional diseases . { Neuralgia. / Spasm.
- Organic diseases . . {
  - Inflammations . . . . . { Simple. / Gonorrhœal. / Of Skene's ducts.
  - Granular urethra.
  - Vesico-urethral fissure.
  - New growths.
  - Vascular caruncle.
  - Prolapse of mucous membrane.
  - Dilatation—urethrocele.
  - Dislocation.
  - Diverticulum.
  - Stricture.
  - Fistula (urethro-vaginal).
  - Foreign bodies.

A few words as to the anatomy may be useful. The urethra is about one and a half inches long, and is a musculo-membranous tube lined by a mucous membrane, with a pavement epithelium near its external meatus and a columnar epithelium elsewhere. It runs from the neck of the bladder downward and forward, approximately in the curve of the true pelvis, and opens anteriorly at the base of the vestibule by the meatus externus. It is supported by being embedded, as it were, in the connective tissue round the anterior vaginal wall, piercing the triangular sub-pubic ligament. There are numerous glands in connection with the urethra. Thus, Littré's glands, which are little more than mucous-membrane reduplications, are described as being about twenty-five in number, running nearly parallel with the urethral floor, and opening into its anterior half to two-thirds by apertures admitting a bristle. The follicles of Morgagni, again, are numerous small racemose glands opening by minute ducts at right angles to the urethral floor. Skene's ducts, which some think are the efferent canals of Max Schuller's glands, are two in number, run parallel to the anterior third or half of the floor of the urethra, and open into it just inside the meatus.

I have had two cases of vaginal cysts which seem, however, to point to Skene's ducts being really the anterior opening of unusually patent Gartner's ducts which run from the Wolffian body in the broad ligaments.

The upper portions of the urethra are formed from the allantois uniting with Müller's ducts, whilst the lower end, lined by pavement epithelium, is formed by the junction of Müller's ducts with the incurving of the uro-genital cleft.

MALFORMATIONS.

Occasionally the urethra is entirely absent, owing to its posterior wall not having been formed. The bladder is then continuous with the vagina, which is practically an undeveloped uro-genital sinus. I have seen this condition exactly imitated by the destruction due to syphilitic ulceration. Plastic operations are here almost impossible, but some good may be done by narrowing the vesical opening into the bladder, and so bringing into use the few fibres of the sphincter vesicæ which are almost invariably present.

Sometimes the lower half of the urethra is absent, or rather its posterior wall, and the effect produced is as if the whole urethra had been drawn up as in retroversion of the gravid uterus, the external meatus being found posterior to the pubic arch. The diminished length of

the urethral canal is, however, easily ascertained by the use of a bulbous-ended sound, whose head is grasped by the sphincter vesicæ, enabling the exact distance from the outlet to be measured by the finger in the vagina. If the hymen is unusually complete, urine is passed into the vagina and passes very slowly out over the hymen. I recently saw a case where the posterior fourchette or anterior margin of the perineum was continued forward almost to the clitoris, causing similar symptoms.

The main symptom of defective formation is incontinence, and this is absolute if the sphincter vesicæ is absent, but slight where the defect is only in the lower parts of the urethra.

Atresia of the urethra may also be complete or partial, the resulting symptom being, of course, retention of urine. This retention leads to a retrograde distention of the bladder, ureters, and kidneys, and causes death *in utero*, or soon after birth, the only escape from this result being where the urachus remains patent and urine passes along it from the bladder through an umbilical fistula. If no water be passed in the twenty-four hours after birth, a careful examination should be made, and if everything appears normal a catheter should be passed, as it not infrequently happens that no urine is being secreted, or it is so loaded with urates that, whilst causing great irritation, it cannot be passed. If no opening into the bladder be found, and especially if vesical distention be evident, a channel must be made and kept open, either in the proper position of the urethra or above the pubes.

FUNCTIONAL DISEASE OF THE URETHRA.

I have named two varieties of functional disease in the table. It is, however, very doubtful whether *neuralgia* exists apart from organic disease either of the urethra itself or of some organ in its neighborhood. I have also seen cases where so-called neuralgia was entirely due to very acid urine, the result of dyspepsia and gout, and speedily relieved by ordinary therapeutic remedies.

Spasm also is usually superadded to true organic mischief in the urethra or elsewhere in the pelvis, and, so far as I have been able to judge, is never present in hysterical retention, which is mainly due to spasm of the sphincter vesicæ muscle, or to a temporary failure of the normal polarity of the vesical muscles.

ORGANIC DISEASES.

The first of this group is *inflammation*.

Urethritis in the female is much less common and much less severe than in the male, owing partly to the urethra's protected position, but

mainly to its shorter length, greater diameter, and straighter course, so that its irrigation is more effectually secured at each act of micturition. There are also fewer lacunæ to harbor irritating or infecting products. The diagnosis of urethritis is easy. After vulvar sponging, pass the finger (not immediately after the woman has micturated) into the vagina, and the urethra can then be felt along its roof to be tender, swollen, and hard, and, on gentle pressure from behind forward, pus is seen to ooze out of the meatus externus, stained, maybe, with blood in acute cases.

Simple acute urethritis is very rare as a primary manifestation, being then due to injury, or sometimes to irritating urine affecting a urethra already granular or dilated, and a course of sedatives, alkalines with purgatives, such as hyoscyamus, buchu, citrate of potash, and Epsom salts, will usually put things right. Direct local measures are rarely called for, but hot hip-baths or hot vaginal douches are often useful. Where simple acute urethritis occurs secondarily by extension of inflammation from the vagina or the bladder, its treatment will be merged with that adopted for the primary disease.

Gonorrhœal urethritis is usually said to be more severe than the simple acute form, but this is incorrect, for a gonorrhœal vaginitis or vulvitis, one of which is almost always the primary manifestation of the disease, may be extremely mild, subacute, or chronic, sometimes being entirely unsuspected by the individual affected. Indeed, it is not rare to find that the only symptom noticed at the time, or recalled afterwards, is the scalding during micturition common to all forms of urethritis at their onset. If there is a history of gonorrhœa or gleet on the other side of the house, the diagnosis is easy, but this history is often not forthcoming, nor is it wise, as a rule, to endeavor to obtain it. The presence of gonococci in the urethral or vaginal pus is also a definite proof of gonorrhœa, and the presence of an acute metritis, salpingitis, and perimetritis is strong presumptive evidence to the same effect, especially if there is a history of such attacks having been recurrent.

In chronic urethritis, a chronic endocervicitis, with a dilated or matted pair of Fallopian tubes, points to a specific origin, but by no means so certainly as was once thought, it being abundantly clear now that a simple vaginitis may cause endocervicitis, endometritis, and salpingitis very readily if the vaginal discharges are allowed to become septic. As a rule, a gonorrhœal urethritis needs no active treatment other than that adopted for the vaginitis, for gonorrhœa in the female attacks almost entirely the generative tract, rarely spreading along the urinary as in the male.