

MEASUREMENTS OF THE NORMAL MALE URETHRA IN 100 CASES.

No. of case.	Age of Patient.	Antecedent History.	Present Condition. Functions, etc.	Prostate Gland.	Length of Flaccid Penis from Meatus to B. M. Junction. In inches.	Circumference of Penis in inches.	Cal. estim'd from circum. of Penis. Mm.	Measurements with Urethrametre.	
								Dis. from Meatus in inches.	Actual Cal. of Urethra. Mm.
68	53	No Gon.	Urinate 2 to 3 times at night.		4 1/2	3 1/4	32	At Bulb to 3 = 33 1/2 From 3 to 2 1/2 = 32 At 2 1/2 = distinct band Meatus = 25	51
69	49	No Gon.			5 1/2	3 3/4	36	At Bulb to 1 1/2 = 40 At 1 1/2 to Meatus = 35 1/2 Meatus = 29	52
70	36	No Gon. Masturbation every day for 5 or 6 years.			5	3	30	At Bulb to 3 = 34 From 3 to Meatus = 29 Meatus = 25	53
71	48	No Gon.			4	3	30	At Bulb to 2 1/2 = 32 = Point of arrest. From 2 1/2 to Meatus = 31 Meatus = 31	3 to 5 Cases 71 to 81 inclusive, were examined with Dr. Peters and Dr. Smith at Bellevue Hosp. 54
72	41	No Gon.	Urinate once at night.		5	3 1/2	32	At Bulb to 2 1/2 = 36 = Point of arrest. From 2 1/2 to Meatus = 34 Meatus = 34	
73	20	No Gon.			4 3/4	3 3/8	34	At Bulb to 2 1/2 = 35 1/2 = Point of arrest. From 2 1/2 to Meatus = 34 Meatus = 29	55
74	48	No Gon.	Penis firm.		4	3	30	At Bulb to 2 1/2 = 36 = Point of arrest. From 2 1/2 to Meatus = 33 Meatus = 24	56
75	19	No Gon.	Penis firm.		5 1/2	3 1/2	34	At Bulb to 3 = 36 = Point of arrest. From 3 to Meatus = 34 + Meatus = 28 1/2	57

MEASUREMENTS OF THE NORMAL MALE URETHRA IN 100 CASES.

No. of case.	Age of Patient.	Antecedent History.	Present Condition. Functions, etc.	Prostate Gland.	Length of Flaccid Penis from Meatus to B. M. Junction. In inches.	Circumference of Penis in inches.	Cal. estim'd from circum. of Penis. Mm.	Measurements with Urethrametre.	
								Dis. from Meatus in inches.	Actual Cal. of Urethra. Mm.
76	30	No Gon. (Denied).			5 1/2	3 1/2	32	At Bulb to 3 1/2 = 35 + = Point of arrest. From 3 1/2 to 1 inch = 33 At 1 inch = 24 band From 1 to Meatus = 30 Meatus = 25 +	
77	24	No Gon.			5 1/2	3 1/2	32	At Bulb to 3 1/2 = 36 1/2 = Point of arrest. From 3 1/2 to Meatus = 34 Meatus = 34	58
78	40	No Gon.			4 1/2	3 1/2	32	At Bulb to 3 1/4 = 35 = Point of arrest. At 3 1/4 to Meatus = 31 Meatus = 32	59
79	40	No Gon. See No. 92. Examined 2 days after	Erection occurred on introduction of Urethrametre. Penis flaccid.	Erect. =	7 flaccid = 4 1/2 Erect. arrest = 4 1/2	3 1/2	35	At Bulb to 2 inches from bulb = 37 from bulb to Meatus = 36 Meatus = 27 1/2	Measurements made during state of erection. 60
80	30	No Gon. Masturbation.	Has had spasmodic stoppage of flow of urine stop for a sec. or two. Dribbles after urination.		5	3 1/2	32	At Bulb to 3 = 35 = Point of arrest. At 3 = 30 From 3 to Meatus = 32 Meatus = 25 1/2	Pus on instrument. 61
81	39	No Gon. Masturbation for 3 or 4 years.			5 1/2	3 3/4	36	At Bulb to 3 3/4 = 42 = Point of arrest. From 3 3/4 to Meatus = 35 1/2 Meatus = 31	62
82	35	No Gon.			5 1/2	4 1/2	38	+ At Bulb to 3 1/2 = 39 From 3 1/2 to 2 = 38 At 2 = 36 At 1 = 33 Meatus = 22	Pat. after exam and of urethritis lasting 6 weeks. 63

MEASUREMENTS OF THE NORMAL MALE URETHRA IN 100 CASES.

No. of case.	Age of Patient.	Antecedent History.	Present Condition, Functions, etc.	Prostate Gland.	Length of Flaccid Penis from Meatus to B. M. Junction. In inches.	Circumference of Penis in inches. Cal. estim'd from circum. of Penis. Mm.	Measurements with Urethrametre.		
							Dis. from Meatus in inches.	Actual Cal. of Urethra. Mm.	
83	27	No Gon. Masturbation from 10 years old to 24.	No dribbling.		5½	3½ = 34	At Bulb to 3 in. } = 35 From 3 in. to Meatus } = 34 Meatus } = 25+	69	Urethra very sensitive.
84	41	No Gon. No masturbation.			5½	3¼ = 32	At Bulb to 3 in. } = 33 From 3 to Meatus } = 31+ Meatus } = 23	64	
85	30	No Gon.			5	3 = 30	At Bulb to 3 } = 32 From 3 to Meatus } = 31 Meatus } = 19	65	
86	19	No Gon. Masturbation for 4 years.			5	3 = 30	At Bulb to 3½ } = 32 From 3½ to Meatus } = 29½ Meatus } = 19½	66	
87	23	No Gon. No masturbation.			4½	3 = 30	At Bulb to 2½ } = 36 From 2½ to Meatus } = 32+ Meatus } = 22½	67	
88	43	No Gon.			5½	3½ = 34	+ At Bulb to 3 } = 33 From 3 to Meatus } = 32 Meatus } = 25	68	
89	45	No Gon.			5	3¼ = 32	At Bulb to 3 } = 34 From 3 to Meatus } = 32 Meatus } = 24½	69	
90	80	No Gon.			4½	3¾ = 33	At Bulb } = 35 No arrest. From bulb to Meatus } = 35 Meatus } = 25	70	
91	38	No Gon.			5	3¼ = 32	At Bulb to 2½ } = 33 From 2½ to Meatus } = 32 Meatus } = 17	71	Folds are very slight.

MEASUREMENTS OF THE NORMAL MALE URETHRA IN 100 CASES.

No. of case.	Age of Patient.	Antecedent History.	Present Condition, Functions, etc.	Prostate Gland.	Length of Flaccid Penis from Meatus to B. M. Junction. In inches.	Circumference of Penis in inches. Cal. estim'd from circum. of Penis. Mm.	Measurements with Urethrametre.			
							Dis. from Meatus in inches.	Actual Cal. of Urethra. Mm.		
92		Case No. 79 in flaccid state.			5½	3¾ = 35	At 3 in. 36 is arrested on 2 or 3 slight ridges. Meatus } = 27½	72		
93	62	No Gon.			5	2¾ = 29	At Bulb to 3 } = 34 From 3 to 2 } = 23 From 2 to Meatus } = 27 Meatus } = 17	73	Pat. admitted 2 inches. attacks of urethritis. Penis 1½ in.	
94	55	No Gon.	Urinate 5 to 6 times at night.		3½	2¾ = 28	At Bulb to 2 } = 30 From 2 to Meatus } = 29 Meatus } = 19	74	Pat. admitted 2 1/2 inch (external) attacks of urethritis. Penis to meatus 1 1/2 in.	
95	24	No Gon.	Frequent seminal emissions.		5	3½ = 31	At Bulb to 3 } = 33 For ¼ inch } = 29 To Meatus } = 32 Meatus } = 23½	75		
96	27	Gon. 5 yrs. ago.			5	3½ = 31	At Bulb to 3½ } = 33 From 3½ to Meatus } = 32 Meatus } = 22½			
							Relative proportion corresponds within two Millimetres in 76 cases.			Cases 90 to 99 inclusive examined with Dr. Pflüger's.
97	53	No Gon.			5	3¾ = 31	At Bulb from bulb } = 32 to Meatus } = 32 Meatus } = 26			
98	53	Gon. 3 yrs. ago.			5	3¼ = 32	At Bulb to 3 inches } = 35 At 3 inches } = 30 For ¼ inch } = 30 At 2½ } = 34 From 2½ to Meatus } = 32 Meatus } = 32		Measurements in this case confirmed on the dead subject by Prof. Stephen Smith and Prof. A. Jacobi.	

## MEASUREMENTS OF THE NORMAL MALE URETHRA IN 100 CASES.

No. of case.	Age of Patient.	Antecedent History.	Present Condition. Functions, etc.	Prostate Gland.	Length of Flaccid Penis from Meatus to B. M. Junction. In inches.	Circumference of Penis in inches.	Cal. estim'd from circum. of Penis. Mm.	Measurements with Urethrametre.	
								Dis. from Meatus in inches.	Actual Cal. of Urethra. Mm.
99	32	No Gon.				$3\frac{1}{2}$	34	At Bulb to Meatus } = 35 Meatus } = 33	1 to 3 Pus on instrument when withdrawn.
100	38	No Gon.			5	$3\frac{1}{2}$	34	At Bulb to $3\frac{1}{2}$ in. } = 37 From $3\frac{1}{2}$ to 1 } = 34 At 1 } = 30 Meatus } = 34	

Patient then admitted "kick" on penis 3 or 4 years previous.

In making these examinations it was found that in almost every instance, there were 2, 3 and 4 distinct ridges at or near the peno-scrotal angle, *i. e.*, from one to two inches anterior to the junction of the bulbous with the membranous urethra. These were at a point where the mucous membrane would naturally fall into transverse folds, in the pendent position of the penis. The occurrence of an erection during examination, in one instance, confirmed this idea, inasmuch as the absence of the ridges was demonstrated with the urethra-metre at 36. But the subsequent examination of the same organ in flaccid condition with the urethra-metre again at 36, three bands were distinctly recognized. These folds then, would form inviting recesses for the lodgment of the solid constituents of the urine during an acid or an alkaline dyscrasia. Prolonged or repeated irritations from such cause, would naturally produce thickenings in these folds, soon interfering with their resiliency, so that they could no longer be obliterated on the natural distensions of the canal; more or less obstruction to urination necessarily results; in other words, a point of irritation has been established, a urethral contraction commenced, which, although not perhaps sufficient to attract attention, *per se*, yet on the establishment of a gonorrhœa, would be quite sufficient to increase the virulence of the disease, and finally to keep up the urethral discharge indefinitely. In confirmation of this view of the formation of non-specific Stricture at the peno-scrotal angle, I exhibited to the Society, upon the occasion of the reading of my reply to Dr. Sands's paper, a lad of nineteen years, who gave positive assurance of never having had gonorrhœa. He was first conscious of urinary difficulty at the age of seven; but beyond frequency of micturition, did not remember any trouble until about three years since, when he began to suffer more or less pain during and after micturition, and which was referred solely to the body of the penis. He presented at my college clinic about a month previous. Examination resulted in the discovery of a vesical calculus measuring  $1\frac{1}{4}$  inches in

its long, and  $\frac{3}{4}$  of an inch in its short diameter. The lithotrite (No. 22 F.), in passing through the urethra was slightly held at about three inches, and then slid easily into the bladder; the stone was readily seized and crushed. On withdrawing the instrument, a small quantity of the debris held between its jaws, resulted in a little greater distension of the urethra than in its entrance, and arriving at the point before mentioned, and which had been the seat of the pain on urination, it was sharply and firmly arrested, and quite a little force was required for the extraction of the instrument. This Stricture (which I demonstrated with the bulbous sound No. 26) must be admitted, as confirmatory of the occurrence of Stricture without precedent gonorrhœa, and from the fact that he had stone in the bladder, the antecedent lithiasis, in connection with the folds of urethral mucous membrane just alluded to, affords an apparently satisfactory explanation of the method by which the Stricture was formed in this case, which may be accepted as typical of a large class.