

IDIOPATHIC SHORT PENIS: MYTH OR REALITY? NICOLA MONDAINI and PAOLO GONTERO – Departments of Urology, University of Florence, and *University of Piemonte Orientale, Novara, Italy

HOW SHOULD PENILE SIZE BE ASSESSED?

Throughout history penile size has been a matter of great debate among men. In recent years this topic has become a healthcare problem, given the increasing number of patients seeking urological advice for a so-called 'short penis'. The penis must be measured along its dorsal side, from the pubic-penile skin junction to the tip of the glans. Length is always recorded while the shaft is flaccid, before and after fully stretching it. There is no need to obtain penile dimensions during erection as the stretched flaccid penis provides a reliable estimate of the erect size [1,2].

The circumference is usually measured at the middle of the shaft. A tape measure is all that is needed to assess penile dimensions.

WHAT IS A NORMAL PENILE SIZE?

Table 1 [1,3–5] lists the reference values for penile length from the main studies in which the above standardized assessment method was used. Despite a substantial agreement in mean values across most studies, the definition of the lower normal limit is still a matter of debate. Wessells *et al.* [1] considered a normal penis to be of any length within the 2 SDs of the mean, i.e. according to their data a flaccid length of <4 cm or a stretched length of <7.5 cm. Ponchiotti *et al.* [3], in a large series of Italian military conscripts, expressed penile dimensions as 'percentiles', with 9 cm in flaccid length and 12.5 cm in stretched length falling in the 50th percentile. By assuming the 25th percentile as threshold they found, as did Wessells *et al.* [1], that <4 cm for the flaccid penis and <7 cm for the stretched penis were below the normal range. As a result of this arbitrary assumption, they estimated that at least 5000 young Italians in the same age range were affected by a pathological short penis. They concluded that 4 and 7 cm should not be taken as an absolute standard to define a pathological situation that needs treatment, but be interpreted in the light of other variables, like the body mass

index, which correlates strongly with penile size [3].

DOES ETHNICITY MATTER IN THE DEFINITION OF A NORMAL PENILE LENGTH?

Interestingly, there is no scientific background to support the alleged 'oversized' penis in black people. Mean penile flaccid length and stretched length recently reported in 123 Korean military men were indeed lower than other values on non-Asian populations [5] (Table 1). At present, in the absence of any comparative study, these values remain debatable, but the possibility of racial differences in penile size should not be overlooked when investigating patients complaining of a short penis.

DO WOMEN BOTHER ABOUT PENILE LENGTH?

Of women interviewed in a recent study [6], 20% stated that the length of the penis was important and 1% deemed it was 'very important'. Opinions about penile girth followed a similar trend, although length appeared less important than girth (21% vs 32%, respectively). The women who found the girth of the penis important had the same opinion about the length of the penis. In the end, only a small proportion of women respondents gave substantial importance to the size of the penis. Again, these values may be used to reassure patients in a clinical setting.

HOW SHORT IS THE PENIS OF PATIENTS SEEKING A TREATMENT FOR PENILE LENGTHENING?

Most if not all the men who seek penile lengthening surgery are likely to overestimate a 'normal' penile length, i.e. they have the so-called 'dysmorphophobia', a falsely reduced image of an otherwise normally proportioned penis. We drew this conclusion after assessing

67 consecutive patients, with a mean age of 27 years [7], presenting to us and requesting a penile lengthening procedure. None of them could be classified as having a pathological short penis according to our nomogram [3]. Most patients found the use of a nomogram to show them how they compared with other men helpful, and we advocate such a demonstration as a valid tool for any men asking an opinion on penile lengthening surgery.

IS PENILE LENGTHENING SURGERY EFFECTIVE?

The term 'lengthening phalloplasty' summarizes a small group of surgical procedures aimed at elongating the shaft, mainly in the flaccid state. The most common techniques to lengthen the penis (that combines the sectioning of the penile suspensory ligament, infrapubic liposuction and a V-Y or Z plasty of the suprapubic skin) provide only rudimentary results and a high rate of dissatisfaction in the patients [8].

However, the pericavernosal apposition of autografts is widely used to enlarge penile girth and it is not unusual for the urologist to see disastrous results from this type of surgery. In a recent technique of augmentation phalloplasty bilateral saphenous grafts were used to increase the corpora cavernosa girth, thus providing a 'true' penile enlargement during erection [9]. Apart from this last exception, surgical penile augmentation remains a controversial issue, dominated more by opinion than a scientific background.

WHEN SHOULD UROLOGISTS USE PENILE LENGTHENING SURGERY?

In our opinion surgery, if any, must be preceded by a thorough clinical approach that we would summarize in three steps:

- (i) Take the penile dimensions (flaccid and stretched length plus a measurement of the girth);
- (ii) Compare the results using a nomogram [3] or reference values, like those reported in Table 1;
- (iii) Counsel the patient; a straight explanation focused on the poor scientific evidence for any treatment being effective, and that any surgery must be viewed as

Ref	Study population	Sample size	Mean (SD) length, cm		Girth, cm, flaccid
			flaccid	stretched	
[1]	USA	80*	8.85 (2.38)	12.45 (2.71)	9.71 (1.17)
[3]	Italy	3300	9.0	12.5	10.0
[5]	Korea	123	6.9 (0.8)	9.6 (0.8)	8.5 (1.1)
[4]	Greece	52	–	12.18 (1.7)	–

TABLE 1
Reference values in the main reported studies on penile dimensions in adult men

*54 white, 20 black and 10 Asians.

experimental and unlikely to significantly enhance the erect penis, may convince some patients to forego a lengthening procedure.

For those persisting in requesting treatment, an opinion from a psychosexual counsellor is highly recommended. Finally, a more open view should be directed at conservative methods of penile lengthening. Despite that the so-called 'penile stretchers' have been on the market for a long time, there are at present only peer-reviewed abstracts on their efficacy [10]. Theoretically, there is no reason to believe that a penile stretcher may be less successful than surgery in elongating the suspensory ligament. Also, the use of noninvasive options gives the opportunity of widening considerably the indications for a treatment that, in most cases, is merely cosmetic.

REFERENCES

- 1 **Wessells H, Lue TF, McAnich JW.** Penile length in the flaccid and erect states: guidelines for penile augmentation. *J Urol* 1996; **156**: 995
- 2 **Chen J, Gefen A, Greenstein A, Matzkin H, Elad D.** Predicting penile size during erection. *Int J Impot Res* 2000; **12**: 328–33
- 3 **Ponchietti R, Mondaini N, Bonafe M, Di Loro F, Biscioni S, Masieri L.** Penile length and circumference. A study on 3300 young Italian men. *Eur Urol* 2001; **39**: 183–6
- 4 **Spyropoulos E, Borousas D, Mavrikos S, Dellis A, Bourounis M, Athanasiadis S.** Size of external genital organs and somatometric parameters among physically normal men younger than 40 years old. *Urology* 2002; **60**: 485–9
- 5 **Son H, Lee H, Huh JS, Kim SW, Paick JS.** Studies on self-esteem of penile size in young Korean military men. *Asian J Androl* 2003; **5**: 185–9
- 6 **Francken AB, van de Wiel HB, van Driel MF, Weijmar Schultz WC.** What importance do women attribute to the size of the penis? *Eur Urol* 2002; **42**: 426–31
- 7 **Mondaini N, Ponchietti R, Gontero P et al.** Penile length is normal in most men seeking penile lengthening procedures. *Int J Impot Res* 2002; **14**: 283–6
- 8 **Wessells H, Lue TF, McAninch JW.** Complications of penile lengthening and augmentation seen at 1 referral center. *J Urol* 1996; **155**: 1617–20
- 9 **Austoni E, Guarneri A, Cazzaniga A.** A new technique for augmentation phalloplasty. Albugineal surgery with bilateral saphenous grafts – three years of experience. *Eur Urol* 2002; **42**: 245–53
- 10 **Colpi GM, Martini P, Scroppo FI, Mancini M, Castiglioni F.** Efficacy of the daily penis-stretching technique to elongate the 'small penis'. *Int J Imp Res Suppl* 2002; **1**: 4

Correspondence: Paolo Gontero, Department of Urology, University of Piemonte Orientale, Italy.
e-mail: gontero@med.unipmn.it