

# A picture of the penis: what your surgeon wants to know

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**Remote consultations have become the norm during the COVID pandemic so obtaining accurate digital images is crucial for diagnosis and treatment planning. Clear guidance for patients on obtaining these images is therefore essential.**

In penile conditions, examination is crucial to diagnosis, management, and patient counselling. Photography and digital images have been used in the field of andrology for several decades to good effect, but the mainstay of clinical assessment has been direct examination.

The COVID-19 pandemic has, however, necessitated what is likely to be a long-term adaption in this process, with remote consultation forming the mainstay of interactions between health care professionals and their patients – clinicians are increasingly turning to digital video platforms and digital images as an alternative to traditional face-to-face outpatient clinics.

Digital images and objective forms of examination such as stretched penile length (SPL) measurement are useful for several reasons: they allow for assessment of penile deformity, provide the surgeon and patient with a shared understanding of 'the problem', and can be used as a tool to set and guide a patient's management and expectations. The current European

guidance also considers digital home photography with subsequent goniometer measurement a satisfactory objective measure of penile curvature.<sup>1</sup>

However, there is currently no standard guidance by which these images are obtained, which often leads to poor attempts at self-photography that can be difficult to accurately interpret. Equally, the difficulties inherent in providing clear instructions over video platforms on how to self-record SPL may lead to a confused shared understanding of 'the problem'. In order to address these issues, we have created written (see page 15) and video guides to aid patients in troubleshooting both of these processes to ensure the production of useful, reproducible images and SPL measurements.<sup>2</sup>

## Peyronie's disease

Peyronie's disease (PD) is an acquired benign condition in which fibrotic plaque formation leads to penile deformity,<sup>3</sup> commonly presenting as penile curvature and indentation, often with erectile dysfunction. The assessment of penile deformity in patients diagnosed with PD is vital to successfully plan non-surgical and surgical treatment interventions, taking into account the duration of symptoms, the presence of erectile dysfunction, SPL, and the impact the disease is having on a patient and his partner's quality of life.

In particular, SPL is important in planning surgical management options with the patient and ensuring that they are appropriately counselled

and have realistic expectations about the impact of any intervention. For example, the plication procedures involved in the treatment of PD include shortening the longer side of the penis to eliminate the curvature and, therefore, are likely to shorten overall penile length. Procedures involving grafting of the penis with/without excision of the plaque are less likely to impact the penile length and are designed to preserve the length that currently exists. Recordings of pre- and postoperative SPL can also be crucial in resolving the disparity between the patient's and surgeon's perceptions of the outcome of surgery.

Lastly, SPL is also a useful measurement in patients with erectile dysfunction choosing to have penile prosthesis implantation. It provides the patient with an accurate understanding of the erect length of their penis postoperatively.

## Current methods

Despite the above considerations there is currently no standard by which digital photographs of the penis are taken, which often results in images of poor quality and limited utility.<sup>4</sup> Similarly, vague instructions on how to measure or estimate the SPL are likely to lead to a discrepancy between patient and clinician understanding of a patient's disease and, therefore, unmet patient expectations and dissatisfaction.

The issues with obtaining accurate photographs of a patient's penile curvature have been demonstrated in studies comparing the use of photos

with physical assessment in clinic.<sup>4,5</sup> However, even in these studies there appears to be no standardised methodology by which these photographs are obtained. For example, in one study the methodology simply states: 'They were instructed to take the photograph from three angles (front, lateral, and superior aspects) during maximum erectile rigidity'.<sup>5</sup>

### Discussion

The lack of clear patient instruction may be a confounding factor in the poor performance of these images in comparison with assessment in clinic. Initial papers describing self-photography do suggest what views of a patient's penile curvature should be captured;<sup>6</sup> however, camera technology and the mechanics of taking a photo have significantly changed since 1983.

Home photography has been criticised for its apparent inaccuracy in some patient groups. For example, it has been shown that digital photography in patients with self-reported erectile dysfunction or erectile dysfunction on validated questionnaires often underestimate curvature when compared with goniometer measurement after intracavernosal injection.<sup>5</sup> Theoretically, this is due to a

suboptimal natural erection, leading to a lesser degree of curvature captured by self-photography.

However, if the purpose of the assessment is planning management, of which the aim is to correct the degree of curvature the patient experiences in daily life, then this is exactly what the photographs demonstrate. In fact, treating a patient based on an intra-operative artificial erection (which could be exaggerated) measurement may lead to a more radical procedure than necessitated. Equally, when using photographs to review the success of an intervention, if the method of achieving an erection and image capture technique is consistent before and after treatment then the effect of erectile dysfunction is controlled for, allowing for the measurement of intervention success.

As such, we have developed patient guidelines, along with video instructions, that aim to standardise both the process of self-photography for penile assessment and the measurement of SPL.<sup>2</sup> These guides include the angles and distances from which the photographs should be taken, and whether the penis should be in the erect or flaccid state at the time and aid patients in troubleshooting the photography and SPL estimation

process. These guides can be utilised by clinicians to inform their patients how to produce reliable clinical images and SPL assessment.

**Declaration of interests:** none declared.

### References

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# How to take digital images of your penile curvature

Your surgeon has asked you to take digital photos of the curvature in your penis. This is to help them get an idea of the severity and location of the curve. It will aid in deciding if you need treatment, and if so which treatment/procedure is best for you. So called 'before and after' images also allow you and your doctor to evaluate how successful treatment has been.

This sheet will explain how to take these photos to ensure they are as clear and useful as possible. This information guide also includes details of where to send these images (please consult your doctor if you are in doubt prior to sending the images electronically).

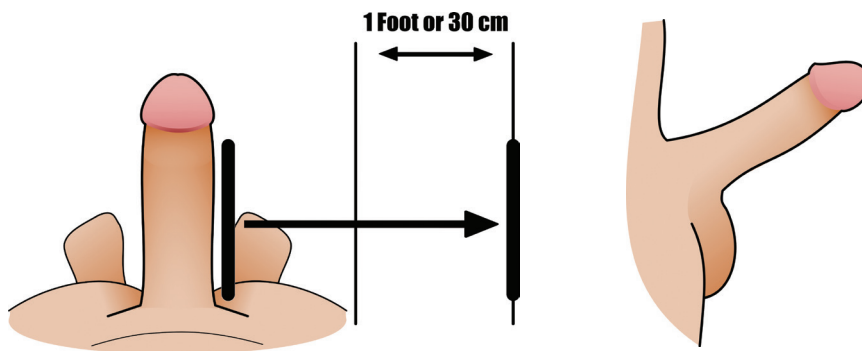
You will need to take two images, one from the side to see how much your penis curves up or down, and then one from the top, to assess how much it curves left or right. It is important that the picture is taken during maximum erection, and at right angles, in good lighting.

## Step 1: photo from the side

Hold your camera or smartphone at the level of your penis. If you have a smartphone this may be easier with the front screen camera to enable you to visually adjust during the process. Please ensure adequate lighting.

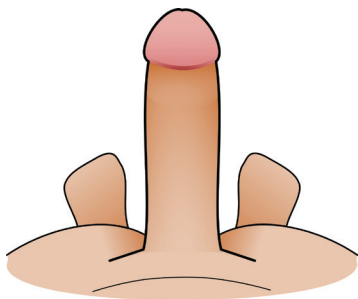
Start with the camera at the level of the penis, then move the camera out roughly a foot from your right hip, keeping it at the same height. Then take a picture of your penis from this angle.

The pictures below demonstrate the process of taking the photo on the left, and roughly what the photo should look like on the right.



## Step 2: photo from above

Hold your camera or smartphone above your penis. Then move the camera directly upwards until it is roughly a foot (30cm) from your penis. Then take a photo. The photo should look roughly like the image to the right.



## Step 3: what to do with the images

Please remove any obviously identifiable information from the images themselves and send them to your surgeon (they should have specified how). Please include your name and date of birth.

These images will be used to measure and assess your penile curvature, and then will be removed from the system and not stored.

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