

4th World Congress on

Medical Imaging and Clinical Research

September 03-04, 2018 | London, UK

New imaging techniques for the male urethra

Juan de Dios Berna Mestre^{1,2}¹Virgen de la Arrixaca University Clinical Hospital, Spain²University of Murcia, Spain

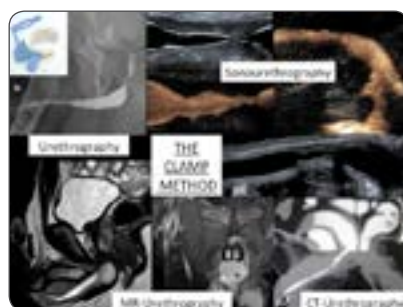
Statement of the Problem: Introduction of contrast in urethrography was first done using clamp devices coupled to a syringe. These were replaced by the conventional technique using a Foley catheter, which is the most widely used method for performing urethrography. The drawbacks of this method are that it can cause pain on inflation of the balloon and it is not useful in cases with urethromental alterations. Sonourethrography has been reported as being more accurate than urethrography for measuring urethral strictures and also for assessing the degree of spongiofibrosis. However, sonourethrography is not widely used, probably due to the difficulty of the technique.

Purpose: The purpose of this study is to describe “The Clamp Method” for performing urethrography, sonourethrography, MR and CT-urethrography.

Methodology & Theoretical Orientation: The present study describes a technique to optimize the imaging diagnosis of the male urethra, using a clamp device and a fine pre-lubricated catheter connected to a drip infusion system. A comparative study with the conventional technique of urethrography was performed. Another study was conducted to evaluate the clamp method for sonourethrography.

Findings: Urethrography could not be performed with conventional technique in the 30 percent of the cases, while all the cases were performed by clamp method. Distressing pain was reported in most cases respect inflation of the balloon, and intense pain with urethral bleeding in some of them, while no pain was reported in most cases except external compression. Sonourethrography showed greater capacity for detecting strictures than urethrography.

Conclusion & Significance: The clamp method of urethrography is simple and well tolerated by patients. It enables just one manipulator to perform sonourethrography. Sonographic contrast is necessary for voiding sonourethrography via the transperineal approach. The clamp method can also be used for CT-urethrography and MR-urethrography.



Recent Publications

1. Berná Mestre J D et al. (2017) Optimization of sonourethrography: The clamp method. *Eur. Radiol.* 28(5):1961-1968. Doi: 10.1007/s00330-017-5211-3.
2. Berná Mestre J D et al. (2009) Urethrography in men: Conventional technique versus clamp method. *Radiology.* 252(1):240-246. Doi:10.1148/radiol.2522082064.
3. Berná Mestre J D and Berná Serna J D (2009) Anterior urethral trauma: Role of sonourethrography. *Emerg. Radiol.* 16(5):391-394. Doi:10.1007/10140-008-0773-7.

4. Berná Serna J D, Berná Mestre J D and Aparicio M (2009) Urethrography in the male: The clamp method. Acta Radiol. 50(2):233-237. Doi:10.1080/02841850802631991.
5. Berná Serna J D and Berná Mestre J D (2003) A new device for retrograde urethrography in the male. Eur. Radiol. 13(6):1420-1422. Doi:10.1007/s00330-002-1662-1.

Biography

Juan de Dios Berna Mestre is a Professor in Radiology Department at University of Murcia, Spain. He has more than 10 years of hospital care experience as radiologist, as well as teaching at the medical school. In his research career he has several publications on various topics, especially on new techniques of ultrasound. His main field of interest is musculoskeletal radiology and one of his main lines of research is the development of a new technique for the imaging diagnosis of the male urethra: the clamp method.

juandeberna@um.es

Notes: