Elastography in Erectile Dysfunction: A Follow-up Alternative

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Urol Colomb 2018;27:299.

Dear director,

Elastography (EG) is an imaging modality used to evaluate the stiffness of tissues such as the breast, thyroid and liver. Recently, other organs of the digestive system have also been included, such as the pancreas.1,2

A study conducted in the year of 2015 evaluated the stiffness of the corpus cavernosum using EG in a quantitative way, and demonstrated that EG is a reliable non-invasive method3 to measure the amount of smooth muscle cells in the corpus cavernosum.4 One problem that affects men is erectile dysfunction (ED), a condition that affects 140 million men worldwide, with an estimated prevalence of 30 to 35% of the affected subjects between the ages of 18 and 40 years. There are multiple diagnostic methods and medical-surgical therapies for the management of this pathology.5 However, Jain et al found that the application of EG in cases previously classified as psychogenic erectile dysfunction actually presented an alteration of the cavernous body, allowing these patients to be categorized with poor or good elastic tissue.5

We, therefore, searched the Pubmed, Scopus, Google Scholar and Scielo databases for evidence on the use of EG in ED. In our search, we used the terms “elastography” and “erectile dysfunction” combined with the conjunctions “AND” and “OR” and found 0 results.

To date, there is no evidence on the use of EG to monitor patients with ED undergoing neo-angiogenic treatments; however, we have experience in our center and the support of previous studies that sustain the possibility of both qualitative and quantitative measurements of the corpus cavernosum complemented with arterial and venous echo-doppler,3,4 which provide an acceptable value for its application in the follow-up of patients with ED.

It is important to carry out a research evaluating the diagnostic capacity in EG, so that it can subsequently be used to assess the predictive capacity of response to treatment with oral therapy as well as with new therapies and clinical trials. This test has a promising future in the field of urology, as it stands out for being such an easy and quick method without adverse effects.

References