

B-01-09

Abstract citation ID: qdae041.012

(335) A NOVEL ULTRASOUND TECHNIQUE CAN PREDICT EFFICACY OF BOTOX INJECTION IN PATIENTS WITH ERECTILE DYSFUNCTION

Dr. Mohamed W. Ragab¹, Dr. David Ramzy¹, Prof. Ashraf Zidane¹, Prof. AboElMagd El-bohy², Dr. Ahmed Z.E.D. Bendary², Dr. Khaled A. Shawky², Dr. Galal El Shorbagy³

¹Cairo University, Andrology, Cairo, Egypt

²Cairo University, Diagnostic and Interventional Radiology, Cairo, Egypt

³Cairo University, Urology, Cairo, Egypt

Objectives: Erectile dysfunction (ED) is the inability to get or keep an erection for sexual activity, affecting 5–20% of men worldwide. Starting from 2016, botulinum neurotoxin was tested for treating ED after a human pilot trial. Shear wave elastosonography (SWE) is one of the ultrasound techniques that can be applied to assess corporal tissue stiffness. We aimed to evaluate the SWE predictability of the outcome of a penile Botox injection.

Methods: Twenty men aged 18–70 with erectile dysfunction and PDE5I non-responders participated in the outpatient clinic of the university hospital. Intracavernosal prostaglandin E1(PGE1) injection. Three elastography measurements for each corpus cavernosum were taken before and after PGE1 injection, and then their average was calculated. 100 IU of OnabotulinumtoxinA diluted in 2 ml of normal saline was injected. The International Index of Erectile Function (IIEF-5), Sexual Encounter Profile questions 2 and 3 (SEP-2 and SEP-3), and Erection Hardness Score (EHS) were measured before and 1 month after Botox injection.

Results: There was marked improvement in erectile function measured as the mean IIEF-5 changed from 8.55 to 14.1.61, $p < 0.001$, with a mean difference of 5.6. SEP-2 changed from 1.75 to 2.56, $p = 0.012$ with a mean difference of 0.77; SEP-3 changed from 1.60 to 2.39, $p = 0.018$ with a mean difference of 0.77; and EHS changed from 1.37 to 1.83, $p = 0.008$ with a mean difference of 0.52. SWE measurements taken after PGE1 injection showed a significant negative association with erectile state outcomes after Botox injection, as measured by IIEF-5($r = -0.429$, $p = 0.03$). In contrast, pre-injection peak systolic velocity measurements showed no significant correlation to outcomes.

Conclusions: shear wave elastography may predict improvement after Botox injection.

Conflicts of Interest: There is no any conflict of interest.