

30. ERECTILE DYSFUNCTION. CONTEMPORARY CONCEPTS OF TREATMENT.

Author: Ciripida Stela

Scientific adviser: Ion Dumbraveanu, PhD, Associate Professor, Department of Urology and Surgical Nephrology, *Nicolae Testemitanu* State University of Medicine and Pharmacy of the Republic of Moldova.

Introduction. There are currently a variety of treatments available with ongoing research. These options focus on the etiology and improvement of erectile function.

Aim of study. The aim of this study is to highlight the advantages of the three types of contemporary treatments.

Methods and materials. Or studied several articles by keyword: low-intensity extracorporeal shock wave therapy (Li-ESWT), stem cell therapy (SCT), and platelet-rich plasma (PRP). The International Erectile Function Index (IIEF) was considered to be the main measure of outcome. Other indices used were peak systolic velocity and intracorporeal pressure.

Results. The Li-ESWT study included a randomised study, 2 prospective cohorts, 2 meta-analyzes. The IIEF saline improved to 3.43 norm (reference range 1.99-6.4). The authors concluded a short-term improvement in erectile function with Li-ESWT. SCT studies included 4 standard cases and one open case. Venous and cavernous, intraperitoneal SCT injections improved erectile function in animals. Three studies (n = 7-9) showed that 85-99% and 25-44% of patients regained erectile function and the ability to penetrate. Two studies (n = 11-17) showed the IIEF score of all patients improved after SCT. Literature review for PRP treatment included 3 animals, 1 retrospective cohort study, and one prospective cohort study. Animal studies have shown that rats with cavernous lesions treated with PRP have improved their erectile function. A retrospective study in men showed an increase of up to 4.4 in the IIEF score. In the prospective one, where the group was 75 people, the improvement of the top systolic velocity (P = 0.0045) and the IIEF score (P = 0.05) with the PRP treatment were demonstrated.

Conclusion. This review reveals limited publications for the contemporary treatment of erectile dysfunction, but it is still necessary to elucidate all types of therapy (Li-ESWT, SCT, PRP).