application of sildenafil-np may represent a significant improvement because of potentially lowered doses for efficacy, improved safety profile, speed of efficacy and the potential to treat patients that are refractory to existing treatments. This new data shows a statistically improved erectile function when sildenafil-np is topically applied on the corpora (local) but no improvement when applied to the abdomen (distal) suggesting the lack of systemic effect on local application.

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**035**

THE MECHANISMS OF STRESS-INDUCED ERECTILE DYSFUNCTION; A FOCUS ON REGULATORS OF CONTRACTION AND RELAXATION IN THE CORPUS Cavernosum BY USING A RAT MODEL OF WATER IMMERSION-RESTRAINT STRESS


1Nagoya City University, Japan

Objectives: Stress is known as a risk factor for erectile dysfunction (ED), but the mechanisms of stress-induced ED have been unknown yet. In this study, we aimed to investigate the mechanisms of stress-induced ED by using a rat model of water immersion-restraint stress, focusing on regulators of contraction and relaxation in the corpus cavernosum.

Materials and Methods: Ten-week-old male Wistar-ST rats were divided into three groups as follows: control, stress, stress+fasudil (Rho-kinase [ROCK] inhibitor) groups (each group with n=6 rats). The rats in the control group were kept in a normal tip cage for 5 days. The rats in the stress group were kept in a cage filled with water to a height of 2.0 cm for 5 days. The rats in the stress+fasudil group were kept in a cage filled with water and were administrated 10 mg/kg fasudil chloride once a day for 5 days. Erectile function was evaluated on the basis of intracavernousal pressure (ICP)/mean arterial pressure (MAP) under the stimulation of the cavernous nerve. The protein expression levels of ROCK1 and phospho (P)-myosin light chain (MLC) in the corpus cavernosum were also evaluated as relaxing factors. The NOx serum concentration was also measured.

Results: The ICP/MAP in the stress group was significantly lower than that in the control group, while that in the stress+fasudil group was significantly higher than that in the stress group. The protein expression levels of ROCK1 and P-MLC in the corpus cavernosum were significantly higher than those in the control group, while those in the stress+fasudil group were significantly lower than those in the stress group. The P-eNOS/ eNOS ratio and NOx serum concentration in the stress group were lower than those in the control group, while those in the stress+fasudil group were higher than those in the stress group.

Conclusions: This study suggests that stress caused ED via enhancement of contraction and decline of relaxation in the corpus cavernosum. Furthermore, this condition is considered to occur due to ROCK1. Therapy targeting both contraction and relaxation in the corpus cavernosum may be effective for stress-induced ED.

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**036**

TRANS PERSONS’ IDEAS AND CONCERNS ABOUT FERTILITY AND FERTILITY PRESERVATION: A POPULATION-BASED SURVEY

Defraye, J.; Motmans, J.; Tillemans, K.;TSjoen, G.

Ghent University Hospital, Belgium

Objectives: Although theoretically options for trans persons to fulfill their child wish are nowadays extensive, fertility preservation utilization rates remain low. The ideas and concerns of trans persons regarding fertility preservation and child wish have never been reported on a large, non-clinical sample.

Materials and Methods: A web-based anonymous survey on fertility and parenthood was conducted in Belgium in 2017. All self-identified trans persons aged 16 years or older were invited to participate, including gender non binary (GNB+) persons, previously ignored in studies on fertility.

Results: The questionnaire was filled out by 426 participants (116 trans men (TM), 196 trans women (TW), 100 GNB+ persons and 14 transvestites). One hundred sixteen (27.2%) respondents had a current/future child wish. Child wish was already fulfilled in 95 (22.3%) and inexistant in 152 persons (35.7%), other categories accounted for 14.8%. GNB+ persons (21; 22.8%) less frequently reported a future/current child wish, compared to TM (43; 39.1%, P=0.013), TW (51; 26.0%). Eighty-two persons (19.3%) considered the loss of fertility due to the transitioning process as undesirable. More GNB+ persons (26; 44.8%) indicated that the loss of fertility was undesirable, compared to TW (32; 23.7%, P=0.003) or TM (23; 19.8%). A majority (62.4%) did not wish for fertility preservation, and GNB+ (2; 2.0%) were less likely to proceed with fertility preservation (which could be explained by the fact that they were less likely to search for medical help), compared to TM (4; 3.4%, P=0.032) and TW (12; 6.1%, P=0.011). Barriers encountered for fulfilling the child wish included: the adoption procedure (70; 16.4%), fear of discriminating against the child (68; 16.0%) and the price for using own oocytes in TM and birth-assigned female GNB+ (43; 10.1%).

Conclusion: Fertility preservation utilization in our trans population is lower than in previous research on clinical samples, although child wish is comparable. GNB+ persons have different needs for gender affirming treatment and subsequently, for fertility preservation. Fertility preservation utilization rates are similar in TM and TW, although theoretically, the procedure is more straightforward in TW. This could be explained by the significantly older age of TW in our sample. These low utilization rates reflect the barriers trans persons face when considering fertility options.

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