Effect of PH94B and Steroid Hormones on Nasal Electrogram Responses and Biomarkers of Autonomic Nervous System Activity in Healthy Human Subjects

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INTRODUCTION

- Social anxiety disorder (SAD) is a common and disabling condition with an estimated lifetime occurrence of 12.6%. Non-invasive recording electrodes were placed on the skin surface to monitor the following autonomic system parameters in healthy adult subjects

METHODS

Study Design
- This was a single-blind randomized study performed in 16 healthy adults (8 men and 8 women) age 20-35. Experimental procedures were conducted after participants signed informed consent

RESULTS

- Intranasal administration of 0.4 µg PH94B resulted in a statistically significant increase in mean EGNR amplitude compared with control (0.5 µg) and in 4.5 µg estradiol-β, progesterone (PROG), and testosterone (TES) in males and females

DISCUSSION

- Increased amplitude of the EGNR observed after PH94B administration was consistent with sympatholysis effect leading to calmness and relaxation

REFERENCES

2. template matching
3. description
4. tool for content analysis

LIMITATIONS

- The findings reported are limited by the small sample size of participants

CONCLUSIONS

- Intranasal administration of 0.4 µg PH94B significantly increased EGNR amplitude and significantly lowered sympathetic autonomic reflex activity

ACKNOWLEDGMENTS

- During interview, inquiries. 13 of the 16 subjects (81%) reported they felt more relaxed and less tense 20 minutes after PH94B administration, but not after administration of placebo or steroidal hormones

- No potential conflicts of interest for subjects

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