

## Session PC1.6

### Hypnotizability Dependent Autonomic Modulation during a Low Attentional Task

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**Objectives:** Aim of the experiment was to study whether not hypnotized subjects highly (Highs) and low susceptible to hypnosis (Lows) differ in their autonomic activity during a controlled, low attentional task eliciting relaxation.

**Methods:** Healthy volunteers divided into 17 Highs (8 females) and 22 Lows (14 females) were asked to concentrate on a movie (30 min) consisting of the sequential presentation of natural scenes. They scored their relaxation before and after the movie, the attention paid to it and the occurrence of boredom (score 0-10). ECG, respirogram and blood pressure (BP) were acquired for offline analysis. A posteriori the session was divided into 2 consecutive conditions (C1, C2, 15 min each). For RR, BPmax and BPmin, the mean values and the standard indexes of variability in time and frequency domain were studied.

**Results:** A) Interview- At the end of the movie all subjects reported an increased relaxation; B) RR- No change in RR mean value was observed in both groups and genders. Highs did not show any significant change in HRV, while Lows increased significantly SD, SD2 (Poincaré plot long axis length), VLFn, and decreased HFn. BPmax- No significant change in mean value occurred in both groups, although Highs decreased HFn and increased LF/HF, and, among Lows, males exhibited significant higher SD, RMSSD, SD2, LF/HF than females. BPmin- No significant change in mean value was observed in Highs; among Lows, in C2, BPmin increased in females and decreased in males, which induced a significant difference between genders. Changes in variability were observed in Highs (increases in SD and SD2) and Lows (SD and SD2 increases in males, decreases in females).

**Conclusions:** In spite of the perception of similarly increased relaxation reported by the two groups, the autonomic activity was only slightly modified and was different in Highs and Lows. The former showed few changes in the BP (max and min) variability; the latter exhibited gender related differences in BP (max and min) variability and in BPmin mean value. The changes in the sympathetic component of RR and BP variability were mainly due to VLFn.

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