
**Abstract:**

**BACKGROUND:** Sibutramine, a centrally acting noradrenaline and serotonin re-uptake inhibitor, enhances satiety and is frequently used to support weight loss. However, a significant variability exists among individuals concerning the response to sibutramine. **METHODS:** We genotyped 111 participants of a randomized placebo-controlled clinical trial for the GNB3 C825T polymorphism and analysed associations of genotypes with treatment outcome. Patients undergoing a structured weight loss programme were treated with either placebo or 15 mg sibutramine daily for 54 weeks. **RESULTS:** In the placebo group, the non-pharmacological programme alone resulted in a significantly greater weight loss in individuals with the GNB3 TT/TC genotypes as compared to individuals with the CC genotype (−7.1 ± 1.2 vs. −2.7 ± 1.5 kg, P = 0.031). Administration of 15 mg sibutramine was more effective in individuals with the CC genotype than in the subjects with the TT/TC genotypes (weight loss: 7.2 ± 2.2 vs. 4.1 ± 2.1 kg, P = 0.0013, sibutramine vs. placebo). In the CC genotype carriers, the odds ratio (OR) for a weight loss greater than 5% (sibutramine vs. placebo) was 6.6 (95% CI 1.8-25.6; P = 0.004) and for a weight loss greater than 10% was 9.6 (95% CI 1.7-53.8; P = 0.010). **CONCLUSION:** Genotyping for the GNB3 C825T polymorphism is highly
predictive for the identification of obese individuals who will benefit from sibutramine treatment.

Zeitschriftentitel / Abkürzung:
Pharmacogenetics

Jahr: 2003
Band: 13
Heft / Issue: 8
Seiten: 453-9
Sprache: eng
Print-ISSN: 0960-314X
TUM Einrichtung: hrungsmedizin

Occurences:
- Einrichtungen > Fakultäten > Fakultät für Medizin > Kliniken und Institute > Else Kröner-Fresenius-Zentrum für Ernährungsmedizin - Klinik für Ernährungsmedizin > 2003

entries: