Buprenorphine augmentation improved symptoms of OCD, compared to placebo - Results from a randomized, double-blind and placebo-controlled clinical trial

BACKGROUND

- Administration of opioids has emerged as a novel treatment for refractory OCD, however few clinical studies have been performed to prove its efficacy
- There have been few new treatment options for OCD in recent years

OBJECTIVE

• Symptoms based on the Y-BOCS score will improve in patients with adjuvant buprenorphine compared to an adjuvant placebo

METHODS

- **Design:** double-blind, placebo-controlled clinical trial over 12 weeks
- **Inclusion criteria:** diagnosed by a psychiatrist or psychologist with OCD according to the DSM 5 criteria, Y-BOCS score or 21 or higher, between the ages of 18 and 40, continuous treatment with SSRIs or clomipramine for at least three weeks prior to the start of the study and continued through the study (patients receiving sertraline, paroxetine, and fluoxetine were switched to citalopram or escitalopram), refractory OCD not responding to medication treatment within the last six months
- **Exclusion criteria:** patients with other comorbid psychiatric conditions, alcohol or drug use, systemic disorders, concomitant treatments (like psychotherapy), female patients that were pregnant, planning to become pregnant, or breastfeeding
- **Primary outcome measure:** Y-BOCS scores and the response rates
- 43 patients included in the study \
 - o 23 received adjuvant buprenorphine 2-4mg daily
 - 20 received adjuvant placebo daily
- Power 90% with an alpha level of 0.05, with a minimum sample size of 30
- No drop-outs in the study

RESULTS

- All patients completed the study
- Primary outcome measure:
 - In the buprenorphine group, Y-BOCS scores decreased significantly from baseline to week 9, but increased from week 9 to 12 (p<0.001)
 - In the placebo group, Y-BOCS scores decreased (not statistically significant) from baseline to week 12 (p >0.09)
 - There was no significant differences for non-responders, partial responders, or full responders between the buprenorphine group and placebo group at week 3 (p=0.83) and week 12 (p= 0.54)
 - There were significantly more partial responders and full responders at week 9 (p=0.023)
- Author's conclusion: Adjunct buprenorphine improves symptoms in patients with refractory OCD

STRENGTHS

- Similar baseline characteristics between groups
- No dropouts
- No apparent conflicts of interest

LIMITATIONS

- Adherence not addressed in treatment or placebo group
- Patients on sertraline, paroxetine, or fluoxetine were switched to citalopram or escitalopram for three weeks prior to the start of the study. Authors did not explain rationale for these two SSRIs, if patients were tapered off of their previous SSRIs, or if patients were indeed stabilized on either the citalopram or escitalopram prior to the start of the study
- Non-pharmacologic psychotherapy (CBT, exposure therapy) is a mainstay of OCD treatment, however was not allowed in this study
- Inclusion and exclusion criteria were very strict, therefore limiting the patient population these results could apply to
- Short duration of study
- No statistical analyses on side effects
- No information given on how buprenorphine was dosed
- No patient assessment of symptoms
- Buprenorphine and opiate problem in the United States would decreased popularity as a treatment

CONCLUSION

- Overall, too many limitations make the findings seem unreliable
- More research would need to be done to confirm findings and broaden the patient population in which buprenorphine could be beneficial as adjuvant therapy
 - Future research in which SSRIs in combination with buprenorphine show the biggest improvement in symptoms
 - o Which subtypes of OCD show the greatest improvements with buprenorphine
 - o Combination of buprenorphine and non-pharmacologic therapy like CBT
 - \circ The time frame of future studies should expand over several months if not longer

Reference: Ahmadpanah M, Reihani A, Ghaleiha A, Soltanian A, Haghighi M, Jahangard L, et al. Buprenorphine augmentation improved symptoms of OCD, compared to placebo-Results from a randomized, double-blind and placebo-controlled clinical trial. J Psychiatr Res. 2017 Jun; 94: 23-28.

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