Oral Appliance and Pharmacologic Agents in the Treatment of Sleep Apnea: A Pilot Clinical Study

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Sub: Oral Appliance and Pharmacologic Agents in the Treatment of Sleep Apnea: A Pilot Clinical Study.

Dear Editor,

I read with interest the article by Stachie at al 'Oral Appliance and Pharmacologic Agents in the Treatment of Sleep Apnea: A Pilot Clinical Study.'[1] The authors need to be applauded for being the first to combine a dental device and pharmacotherapy. The inclusion criteria included patients with AHI 20 to 50 (Median baseline 32.96), with severe obstructive sleep apnea. These patients are at high risk for undesired sequalae of ineffective treatment. We are not sure if these patients were offered CPAP therapy, were intolerant of therapy or refused therapy. As CPAP is considered first line of therapy it is unclear if they had offered CPAP therapy patients before enrolling them in clinical study.[2]

The authors state that 'Two patients were dropped from the study because they were nonresponsive to oral appliance therapy per medical judgement of the consultant sleep physician after the first study polysomnogram (MAD + placebo). One patient could not tolerate the oral appliance and was excluded.' However, these would create significant bias in assessment of results. They conducted PSG after 28-day study protocol. Any viable alternative therapy for severe OSA should have longer follow up to see if the therapy is effective in a chronic disease like OSA. This may be necessary this to be an alternative therapy. As such significant risk studies may need to be long term, and not using known effective therapies may result in adverse events.

Use of Fluoxetine raises interesting question. SSRIs like citalopram, fluvoxamine, paroxetine, and sertraline decrease total REM sleep and increase ROL (rapid eye movement onset latency) in acute (1–2 nights) and chronic (> 21 nights) administration in both healthy volunteers and depressive patients. [3] In the long run, this may have unintended impact on sleep architecture

and may need to be evaluated with long term follow up. It also would be interesting to see in their current study, the patients who were on pharmacotherapy had any changes in their sleep architecture. This was observed in earlier study by the investigators in which 'there was a trend toward degraded REM sleep in the group receiving high dose combination treatment: REM latency increased by 10%, and REM duration and REM percent of TST decreased by approximately 5%'.

In the current context of massive Phillips CPAP recall, this may be an ideal time wherein we should actively develop alternate therapies for Severe OSA[5]. The sleep community awaits further studies with combined therapies with dental device along with other pharmacotherapies if they can be viable alternative therapies for severe OSA.

References:

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