A Little Knowledge Is a Dangerous Thing

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The new guidelines for the use of oral appliances in the treatment of obstructive sleep apnea discuss for the first time the minimum required to be considered a "qualified dentist." ¹

The "qualified dentist" designation is intended to be a minimum standard. The "qualified dentist" definition also limits the type of institution/educator that is considered eligible to provide "qualified dentist" continuing education credits. The expectation is that the education will adhere to the guidelines in the critical areas of diagnosis, treatment and outcome assessment.

Recently, a patient whose management highlighted the need for "qualified dentists" presented to a clinic.

His cardiologist referred him for "assessment of existing oral appliance." The patient was a 70 year old male, BMI = 36, neck circumference = 45 cm, currently treated for hypertension and GERD and undergoing investigation for ischemic cardiac disease. He had reportedly gained 15 lbs in the past two years. He had a cleft palate repair as a child but had no present limitations to eating, drinking or speaking due to the repair.

The patient had been diagnosed with severe obstructive sleep apnea (OSA) several years previously. His chief complaint had been snoring without daytime symptoms. He had been tolerant of CPAP. He had been using a chin strap with his CPAP. He developed tenderness in his TMJ's and sought advice from his family dentist. His dentist reportedly pronounced the CPAP and chin strap responsible for the TMJ soreness and without consulting the sleep physician recommended discontinuation of CPAP and fabricated a custom-made, monobloc oral appliance (OA). The OA controlled snoring. The patient's wife was satisfied and no further evaluation was conducted.

The cardiologist now investigating the patient's cardiac concerns ordered a home sleep test (HST) to assess treatment effectiveness. The patient's only concern was an increase in disruptive snoring. His Epworth Sleepiness Scale (ESS) was 5/24 and his Calgary Sleep Apnea Quality of Life (SAQLI) was 5.40. An HST was conducted while wearing the monobloc OA. The respiratory disturbance index (RDI) was 34 events/hour (patient slept primarily in the lateral position). The mean oxygen saturation was 86%. The lowest oxygen saturation recorded was 76%. The patient spent 92% of the recording time below an oxygen saturation of 90% and 12% of the time below 85% oxygen saturation.

This patient has not been given quality treatment. He has been using an oral appliance that likely has only masked his only severe OSA symptom-snoring. He may have sustained irreversible end-organ damage as a result of years of inadequate treatment. There is a failure of the dentist to understand the need for treatment outcome assessment and the lack of correlation between snoring control and apnea control. There is a failure to communicate with the physicians. This failure is very possibly due to poor education. The dentist who made the monobloc very likely didn't understand the negative consequences of replacing CPAP with an inadequate OA. The "qualified dentist" designation evolved with the goal of providing basic training in clinical care paths, physician-dentist communications system well as OA fabrication.

There are other gaps here as well. Where was the follow up of the CPAP provider, of the sleep physician and the primary care physician?

A qualified dentist providing OA therapy according to the recent guidelines is a leading example of state-of-the-art care. Let us hope for the benefit of patients that all health care providers involved in OSA therapy continue to improve basic standards of care.

CITATION

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SUBMISSION & CORRESPONDENCE INFORMATION

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DISCLOSURE STATEMENT

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