

NEWS *in SLEEP DISORDERED BREATHING*

Tongue-base Radio Frequency Treatment

This is a new procedure available at the Sleep Surgery Centre for those snorers and obstructive sleep apneics whose airway collapse is at the retrolingual level of the upper airway. Most of these patients have palatable obstruction too which, when treated, gives them partial improvement. For the retrolingual component of their obstruction, however, the only treatment available in B.C. to date has been a dental appliance or expensive mandibular, and sometimes maxillary, surgery. Pioneered by Nelson Powell at Stanford University in 1999, tongue-base radio frequency (TB Rf) is now a well established and safe method for reducing tongue base mass, including the retrolingual tonsil which so often hypertrophies after childhood palatine tonsillectomy. A multi-institutional study of TB Rf, applied serially over several months to 56 patients, has shown a mean improvement of apnea/hypopnea index from 40 to 33. TB Rf seems to be a useful adjunct to uvulopharyngopalatoplasty in severe OSA, and an effective option on its own for less severe OSA patients and snorers with retrolingual obstruction. As with CPAP, it is not as yet covered by MSP.

Auto-Titrating Continuous Positive Airway Pressure (ACPAP) with Compliance Monitoring

This form of CPAP provides a variable-output air pressure which increases with airway resistance. Since obstructive sleep apnea (OSA) is generally an episodic occurrence throughout the night, the pressure is minimized when the obstruction is absent or mild, and increased appropriately during the obstructive episodes. Combined with a data-collecting system on a computer card, the CPAP specialist can review the pressures over time, and advise the patient accurately on the optimal fixed pressure. For this reason CanSleep Services has been using auto-titrating CPAP for its 1-month CPAP trials for the last 2 years. It takes much of the guesswork out of CPAP pressure selection. As a permanent form of therapy it has some theoretical advantages over fixed-pressure CPAP (e.g. auto-adjustment to altitude change), but the improved compliance one would hope for has not yet been proven. However, any CPAP with a data-recording card should be seriously considered by the prescribing physician when compliance monitoring over the long term is important, e.g. annual checks of compliance in a truck driver with OSA. Such annual checking can now be easily arranged by phone with CanSleep who will call in the patient's card by mail on his or her anniversary and send the compliance results to the requesting physician.

Richard R.J. Smyth, M.B.B.S., F.R.C.S.

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Integrated Care and Tailored Treatment for Sleep Disordered Breathing