
SUCCESSFUL TREATMENT OF SNORING USING HYPNOSIS

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ABSTRACT

The following case study reports the successful treatment of a female patient, aged 25, with a long history of chronic snoring. Following nasal endoscopy, which confirmed that there was no anatomical reason for her complaint, she was referred to the present author who made further investigations regarding her sleeping habits. In the first session, it became clear that, during a period of at least ten years, she never felt comfortable at night: she often slept with her mouth open and with her neck raised upwards. Using a naturalistic induction (Erickson & Rossi, 1981), she was given indirect suggestions to relearn how to sleep calmly and 'like a child'. Both direct and indirect suggestions were also given to breathe in through her nose and out of her mouth and that, whenever she felt uncomfortable, anxious or stressed, she should turn over onto her side and relax immediately (Kraft, 2003a). The patient made a remarkable recovery in two sessions and this was maintained at the one month follow up.

Key words: snoring, obstructive sleep apnoea syndrome (OSAS), naturalistic induction

INTRODUCTION

Snoring is one symptom amongst a group of disorders known as sleep disordered breathing (SDB). It is estimated that at least 30% of the population snore occasionally (Dzieciolowska-Baran et al., 2009), while up to 20% of all adults develop chronic symptoms (FOMD, 2012). As one grows older, the possibility of developing the condition is increased: adults over the age of 60 are 50% likely to snore, and between 30%–50% suffer from obstructive sleep apnoea syndrome (OSAS) or upper resistance syndrome (Dzieciolowska-Baran et al., 2009).

Snoring is produced by palato-uvular vibrations of the soft tissues of the upper airway during sleep – i.e., the soft palate and posterior faucial pillars (Leung and Robson, 1992). Clinical studies have indicated that, during sleep, the muscles of the nasopharynx relax (Lugaresi et al., 1994): this narrows the upper airway and causes alterations in air pressure, leading to vibrations of the tissues.

The aetiology of snoring seems to point to an anatomical narrowing of the nasopharyngeal airway, more commonly associated with hypertrophy of the nasopharyngeal lymphoid tissue – that is to say, the tonsils and adenoids (Leung and Robson, 1992). Other potential causes include nasopharyngeal cysts (Adil et al., 2012), nasal septal deviation (Chen et al., 2009), micrognathia (Orenstein et al., 1983) and choanal atresia (Brown et al., 1996), but these are fairly uncommon. In addition, upper respiratory tract infection or allergic rhinitis may also lead to snoring symptoms due to restricted nasal airflow. It is for this reason that specialists advise snorers to stop smoking as this frequently causes mucosal oedema (Olsen and Kern, 1990;

Leung and Robson, 1992), while the inflammation results in a narrowing of the nasopharyngeal airways (Olsen, 1987).

Another common cause of snoring is inadequate oropharyngeal muscle tone – indeed, hypotonia of the oropharyngeal muscles may occur in some individuals and this is exacerbated by the use of tranquillizers, some forms of antihistamine medication, specific recreational drugs or by the consumption of large quantities of alcohol (Issa and Sullivan, 1982; Herzog and Riemann, 2004). Indeed, it has been well-documented that alcohol consumption has a relaxing effect on oropharyngeal muscles (Garrigue et al., 2004). In a study of 30 patients over a two-year period, Issa and Sullivan (1982) concluded that there was a strong correlation between the severity of the snoring condition – and possible development of OSAS – and alcohol consumption. It has also been the conclusion of many researchers that weight – specifically, a patient's collar size – is closely related to snoring. This is due to increased adipose tissue deposition in the neck and pressure on the throat (Stradling and Crosby, 1991; Davey, 2003; Dzieciolowska-Baran et al., 2009).

For many years, simple snoring has been thought of as a benign condition. However, some recent studies have implied that heavy snoring may indicate alveolar hypoventilation (Partinen, 1995) and, although, OSAS has more serious implications such as hypertension, stroke and myocardial ischaemia (see for example, Kohler et al., 2008), snorers may experience hypoventilation – consciously or otherwise. This, in turn, may be closely associated with hypoxemia which may lead to pulmonary hypertension or cardiac arrhythmias. It has also been suggested that there is a possible connection between snoring and the increased risk of developing cerebral infarction and angina pectoris (Lugaresi et al., 1994; Mooe et al., 2001). However, it is important to note that the evidence for a possible connection between snoring and both coronary artery disease and cerebrovascular disease has been inconclusive (Counter and Wilson, 2004). There are two main reasons for this: first, none of the studies which suggested that there was a link between simple snoring and cardiovascular disease used a polysomnograph to validate findings (Counter and Wilson, 2004); and, second, studies which excluded sufferers of OSAS found no link between snoring and systemic, cerebral or coronary circulation problems (Waller and Bhopal, 1989; Schmidt-Nowara et al., 1990; Counter and Wilson, 2004). Interestingly, a study by Stradling and Crosby (1991), who investigated the relationship between systemic hypertension and snoring ($n=748$), concluded that, 'the increased prevalence of cardiovascular complications reported in snorers may be due to the confounding variable of obesity or to nocturnal rises in blood pressure' (Stradling and Crosby, 1991: 75).

Nevertheless, habitual snoring can lead to a great deal of distress, and sufferers often complain of drowsiness, loss of concentration during the day, and disrupted sleep at night. Further, it can cause relationship problems, and this can lead to sexual avoidance, irritability and marital disharmony (Sharief et al., 2008).

The present study may be of interest to readers because the patient did not seem to fit into any of the above categories which would normally cause or worsen her snoring condition. In the first instance, the patient was female and within the low risk age group (she was 25); she was also of slight build, regularly exercised and rarely consumed alcohol. In addition, she never took recreational drugs and, because her snoring did not affect her sleep, had no need to take sleeping tablets. On physical examination, the ENT specialist, prior to her consultation with the present author, concluded that there was no anatomical reason for her snoring complaint. Her

nasopharyngeal airway had no signs of obstruction; there was no evidence of allergic rhinitis, polyps or septal deviation in the nose; while her palate, tonsils, lateral pharyngeal mucosa and oropharyngeal space were normal. And yet, her friends reported that her snoring at night in the supine position, and on journeys in a seated position, resembled a sound similar to that of a 'fog horn'. Her friends also reported that she never looked comfortable asleep, and that her head was frequently tilted backwards with her mouth open. It, thus, seemed highly plausible that her snoring was inextricably interconnected with her sleeping position – particularly the position of her head – and her anxiety levels throughout the night. It was, therefore, suggested that hypnosis could be used in order to help her to sleep more comfortably, to adjust her head position and to help her to breathe more controllably during the night.

CASE STUDY

Lilly was a slim 25 year old lady who had been suffering severely from snoring for many years. She told her therapist that her friends always joked about her snoring and described it as being 'like a fog horn', and, on many instances, they felt that she was choking in her sleep. This produced a huge amount of avoidance behaviour: she often spent large amounts of money on taxi fares in order to get home so that she wouldn't embarrass herself snoring at a friend's house; she would also stand up on the underground, even if there were seats available to make certain that she would not fall asleep. In addition, she slept restlessly and often complained that she woke up with a headache; she also complained that when she woke up, she felt that she had not had an adequate night's sleep and this had had a deleterious effect on energy levels throughout the day. She had been to her GP on many occasions and he assured her that she had not had any medical problem whatsoever. Her doctor performed a nasal endoscopy and confirmed that there was no anatomical reason for her snoring. From time to time, she tried various decongestant sprays before going to bed, but these had not helped her in any way. One of her motivations for treatment was that she had just met a young man and they had started going out together: she said that she very much wanted to ask him back to stay the night but she feared that her excessive snoring would make her unattractive to him. Although she complained that, on a few occasions, she had been woken up by her snoring, she claimed that, for the most part, she had no idea that this was happening; indeed, the only reason that she was aware of a problem was due to her friends' complaints. She told her therapist that next week she was about to go away for four days with her best friend and she hoped that some improvement would be made in one session. The author felt that it was important that she had the support from her best friends and Lilly concurred; he also stressed that every change for the better should be praised and acknowledged – that is to say, they should focus on all the positive changes rather than on the negative. Lilly also asked her therapist about other problems associated with snoring. The author said that men were more likely to suffer from this condition than women and that being overweight – especially having a large-sized neck – were factors that would increase the likelihood of suffering from snoring and/or OSAS. It was further pointed out to her that individuals who drink alcohol excessively, those who smoke or take hypnotics at night add an increased risk (Krieger, 1996).

Lilly said that she was able to breathe through her nose during the day, but that, according to her friends, when she was asleep, she kept her mouth open. She said that she tossed and turned and that her sleep was usually a rather stressful experience. In the morning, she often

felt 'un-refreshed' and this regularly caused her to feel tired throughout the day and had an effect on her concentration.

A naturalistic induction was used and this focussed on breathing naturally and utilizing her natural ability as a child to enjoy sleeping quietly and calmly (see Erickson and Rossi, 1981): Lilly was able to go into hypnosis very quickly and easily. This was set up as follows:

And I wondered if you have ever considered the fact that when you were a child ... or perhaps at some earlier time in your life ... you have learned ... and always and already learned how naturally to breathe and sleep calmly ... all the way through calmly and relaxed ... and just as when you were a child and there was nothing more important for you to do than to just breathe slowly and lie there relaxed and comforted ... you can be constantly receptive to this behaviour and re-learn this ability ... so that it happens naturally ... and the natural state of hypnosis can help you re-learn this ability ... just by keeping your eyes comfortably closed and allowing, inwardly, for your unique self to focus on your abilities to breathe slowly and in a relaxed way ... and as you become more relaxed you notice how in control you are of your ability to sleep quietly and calmly ...

The author then gave suggestions that, like the ebb and flow of the waves on the seashore, she would be able to breathe naturally. She was also asked to concentrate on her breathing and was given the direct suggestion that, when she went to sleep each night, she would be able to utilize this technique so that she could be perfectly relaxed throughout the night. Lilly remained silent throughout this process and breathed in a controlled and silent manner. She was then given the opportunity to imagine a computer screen in front of her, and to visualize a number of windows – like a function menu of a DVD programme – which featured pictures of her sleeping at night. I asked her to find the window which showed her sleeping without snoring. She said that there was only one window and that she would have been thirteen years of age at the time. She clicked on the window, and experienced having a good night's sleep – again, throughout the process, she remained perfectly calm and relaxed and made no sound whatsoever. The author asked her whether there was another window which featured her sleeping without snoring but Lilly confirmed that this was the only one. The therapist then asked her to describe the frame of the window at which Lilly pointed out that this window was of a circle shape while the remaining windows were triangular. She was then given the opportunity to change as many windows into circles as she felt were appropriate. The author pointed out to her that each circle represented her sleep cycle and that she would be able to reach all the stages of sleep, more and more, as she practised this technique.

This stage of the therapy involved her imagining herself pretending to be asleep and she remained silent throughout the process. She also visualized imagining feeling refreshed as she got up, having had a good night's sleep. Lilly was then given further suggestions that she would be able to continue using this technique at night, and that she would learn and re/learn this behaviour until it became second nature. A post-hypnotic suggestion was given that if she ever started to snore, her unconscious would make that known to her and that she would roll onto her side and immediately stop. Using a truism, it was pointed out to her that it was very unlikely for her to snore if she slept on her side (Cartwright, 1982; Kraft, 2003a), and that the fact that she was enjoying a relaxed sleep would eliminate her snoring. This was set up as follows:

Of course, it is well-known that one is less likely to snore on one's side ... we all know that ... and as soon as you turn over onto your side you will become more relaxed ... and you will breathe calmly..and the more calm you feel, the more you will realize that there is nothing more important for you to do than to enjoy drifting from one stage of sleep to another ... all the way through enjoying your sleep ... because this is your time to recuperate and then rejuvenate yourself for the next day ... and you don't have to be conscious at all of this process ... because this process will happen on its own ... so just continue to enjoy these sensations and then my voice will come back to you ...

After the hypnosis, Lilly said that the whole event was bizarre and she felt that she was actually asleep. The author told her that this was a good thing and, in fact, she might have been asleep for some of the time. Importantly, Lilly had been silent throughout the hypnosis and she was very pleased about this. At the end of this first session, she was taught self hypnosis, and we agreed that she would lie on her back during the induction, and that, when she was ready to go to sleep, she would roll onto her side, continuing to breathe in a controlled way through her nose. It was also pointed out to her that, in order to control her breathing, she could occasionally breathe through her mouth when exhaling. We arranged for an appointment in three weeks because the author had arranged a holiday for that period of time.

When Lilly came for her second and final session, she told her therapist that her best friend had made sure that there were separate beds for them to sleep in; indeed, he commented that he feared that he would not be able to get to sleep and that he would hear her snore and toss and turn in bed throughout the night. However, much to Lilly's surprise, he said that he did not hear a thing throughout the duration of their time away. Lilly was amazed by this. She also felt that she was more relaxed during the night and did not toss and turn during the early stages of snoozing before getting to sleep. She commented that the whole experience of going to sleep was much more enjoyable and that she felt more refreshed in the morning. And, even though on a couple of occasions, she had drunk a moderate amount of alcohol, this also did not affect her ability to breathe normally. Each night, before going to sleep, she practised self hypnosis and gave herself suggestions that she would be able naturally to fall asleep and, breathing through her nose, she would be calm and relaxed until the morning.

In addition to this, Lilly reported that she went to sleep on the sofa while her father was in the room – she did this in order to build her confidence, and also to prove to herself that she could remain silently asleep in different locations. Again, her father said that he had not heard a sound from her mouth. With this newly found confidence, she asked her boyfriend to stay over. Ironically, he was a bad sleeper himself: he had to get up several times in the night and found it difficult to relax and find the right position in bed. The author reassured her by explaining that it often takes time to get used to sleeping with a new partner. Lilly stressed that she didn't want to make a 'big thing' about her snoring as she felt, quite rightly, that if she mentioned it, he might become over-sensitive to any sounds that came from her during the night. Again, Lilly did not snore during the night, although her boyfriend did point out that she had made 'cute sounds' at one point in the evening.

The author asked her what she wanted to do in the hypnosis, and Lilly replied that she felt that she was able to sleep normally without snoring in bed, but that she wanted to practise going to sleep in a sitting position – i.e., on the tube. The induction involved her imagining that the chair she was sitting on was a seat on the tube. She took three deep breaths and was again

encouraged to breathe slowly and to sit there calmly and relaxed. The author used a double bind by saying that she could sit there quietly and relaxed by pretending to be asleep or by actually going to sleep. She practised successfully enjoying sleeping without snoring in many different situations – again and again. The author then gave her the post-hypnotic suggestion that this ability would become 'second nature' and that, now she had relearnt this skill, she would never forget it. She booked a session for a month's time and we agreed that this would serve the purpose of being a follow-up appointment.

FOLLOW UP AND STRUCTURED INTERVIEW

At the one month follow up, Lilly said that she was completely rid of her snoring problem. There was only one occasion that she snored and the author felt that she needed reassurance about this event. Lilly explained that one night she had a cold and had had difficulty breathing throughout the evening. She explained that her chest was tight, her nose was blocked, she experienced a great deal of congestion and catarrh in the throat. Her therapist explained that if she was having difficulty breathing anyway this would account for her snoring, and that anybody in that position would also have a similar problem when trying to sleep. Apart from this one event, Lilly had been completely free from her snoring symptom. Interestingly, her new boyfriend, who had stayed over many times since her last session, was a light sleeper, and Lilly explained that this was a 'perfect test' because the slightest noise or movement would cause him to wake up. Further, Lilly said that he had trouble maintaining his sleep, and commented that he was awake for long periods of time during the night. Lilly concluded from this that, if she had snored, or had made the slightest of sounds, her boyfriend would have noticed straight away. Lilly was delighted with the result of this treatment and the length of time it took to see these results. She felt that her snoring problem had been eliminated and, further, that she had relearnt to breathe easily in her sleep, and to enjoy sleeping at night. The following structured interview was also undertaken towards the end of this follow-up session.

Question 1. What medical check-ups did you have prior to coming for therapy?

Lilly explained that she had been to her GP because she felt that her asthma and occasional bouts of congestion were affecting her breathing at night. At various times, she had been advised to try nose sprays, or take antihistamines and inhalers, all of which proved ineffective. A consultation with an ENT specialist, who had undertaken a nasal endoscopy to look at her upper airways and nasal passages, confirmed that there was no anatomical reason for her snoring complaint. Lilly complained that she felt lethargic after a night's sleep and constantly felt drowsy during the day: the doctor, therefore, also performed various blood tests – for example, thyroid functioning tests, iron profile, glucose levels, full blood count and haemoglobin levels – and concluded that there was no medical reason for her snoring and associated loss of energy throughout the day.

Question 2. Which decongestants sprays, antihistamines and inhalers did you use and how successful were they in helping you?

Lilly said that she had tried Beconase Aqueous Nasal Spray (Beclomethasone) in order to reduce any inflammation of the nasal passages, the antihistamine, Periteze (Cetirizine), and various other inhalers.

Question 3. Can you tell me about your experience of having hypnosis and say what the benefits are, if any, from not snoring?

Lilly said that she was delighted that she is now able to sleep without any problems whatsoever. She said that, for twelve years, sleeping was 'stressful and disrupted'. Often, she would wake up in the morning feeling 'un-refreshed', and, regularly she complained of feeling 'fuzzy-headed' or of having a headache, 'like a hangover'. She pointed out that not only had she eliminated her snoring but she also felt that having a sleep was much more relaxing, and not stressful in any way; in addition, in the morning she felt more energetic, she continued, 'as a direct result of having a better night's sleep'. Generally, she found it easier to get up in the morning; her sleep felt 'better quality' and her energy levels had also gone up throughout the day. Finally, Lilly said that in the past she would avoid going to sleep at friends' houses because she didn't want to make a fool of herself; but, now, she felt that she would be able to stay anywhere she wished.

Question 4. Can you tell me what you think worked best in the two sessions that you have had? Why was the hypnosis successful?

Lilly said that the breathing exercises which initiated the hypnosis were extremely helpful and that, before going to sleep each night, she would get herself into a calm 'mind set'. In essence, she would do self-hypnosis each night before going to sleep. She also pointed out that, whereas in the past when she would not prepare for sleep, she would now blow her nose to make sure that the upper airways were completely free. In short, she had relearnt her ability to relax in bed.

Question 5. Is there anything else which is important to mention about the therapy?

Lilly said that it was a combination of the work done in the consulting room and her homework tasks – the breathing exercises and 'naturalistic' self-hypnosis – which had helped her to eliminate her snoring.

At the end of the session Lilly worried about the fact that she felt that she could not sleep on the train. She said that her head would often drop backwards and she knew that she would snore. The author reassured her that if her head dropped backwards it would be impossible to breathe without 'snorting' or, in fact, snoring; indeed, anyone would find this problem because when one's head drops backwards, the back of the tongue covers the upper airway causing a vibration of the respiratory structures with the result of producing a sound, due to the obstructed air movement. We agreed together that this did not, in any way, mean that she had not eliminated her snoring: she was still able to sleep calmly in her bed, and on her side, without a sound. However, her therapist did suggest that she could sleep on the train by tilting her head slightly forward which, although less comfortable, would help her to breathe more easily. Apart from this, Lilly said that she was trouble-free and looked forward to enjoying many refreshing nights' sleep in the future.

COMMENT

Many studies have shown that patients who sleep on their backs have a significantly higher level of sleep disturbance (Oksenbergh and Silverberg, 1998). It is believed that sleeping in the supine

position causes a gravitational pull on the tongue forcing it to come in contact with the posterior pharyngeal wall. Therefore, any technique that encourages patients to sleep on their side, at least part of the night, could be beneficial (Veis, 1998; Kraft, 2003a). But what is interesting here is that it was the patient's sleeping position and head posture that were the source of her snoring problem – a condition that had had a negative impact on her life, and had affected her relationships with the opposite sex for many years. And, having relearned to breathe and sleep calmly during the night – and to move onto her side – her chronic snoring disappeared.

The treatment outlined above is cost effective and should be considered for the following reasons. First, this approach can result in the complete elimination of the snoring, whereas the use of mandibular repositioning splints, nasal and oral applications and/or the continuous positive airway pressure device (CPAP) (see Kushida et al., 2005; Lindberg et al., 2006) merely manage the condition. Second, this treatment programme does not involve invasive surgery which may lead to further complication (Ellis et al., 1992; Franklin et al., 2009). It is, therefore, recommended that, if there is not any anatomical reason for the snoring symptom, hypnosis should be considered, certainly as a first-line approach (Kraft, 2003b). And, if required, hypnosis can be included as part of a multi-modal approach including the management of alcohol intake, diet and exercise.

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