Tinnitus Masking in the 21st Century

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Ask most hearing healthcare professionals to define tinnitus masking, and likely you will be told that masking is the state wherein an externally-generated broad band sound covers the tinnitus such that the tinnitus cannot be detected. (That was certainly my initial understanding of the process.) Ask further about masking, and the conversation might result in a discussion of residual inhibition, the phenomenon whereby the tinnitus might not be detected for a period of time even after removal of the masking sound. You might learn of the faucet test for maskability: when tinnitus cannot be detected in a shower or while the water is running in the sink, it is much more likely to be successfully masked than tinnitus that can still be detected under such circumstances. The conversation with a knowledgeable hearing healthcare professional might even progress to consideration of various masking curves, again with the idea being that masking involves the inability to detect the tinnitus in the presence of the masking signal.

Masking took on a whole new light in my eyes several years ago at a breakfast meeting with Dr. Jack Vernon, the father of modern tinnitus masking. I had just completed a casual survey of several tinnitus authorities, all of whom defined masking in the manner described in the opening line of this article. Dr. Vernon seemed surprised, actually somewhat dismayed, that he had not been able to adequately convey to the tinnitus community that masking should not be defined in terms of covering the tinnitus; rather it should be defined strictly in terms of relief. Specifically, Dr. Vernon, who sadly passed away in November 2010, saw masking as the immediate achievement of some degree of relief from tinnitus through the use of externally-generated sound. It is as simple – and as profound – as that!

Inherent in this definition is the concept that the source of the external sound can be through the environment, through the use of tabletop devices that make sound, through the use of hearing aids to enhance environmental sounds, through the use of wearable "tinnitus maskers," or through the use of combination amplification/masker units. More importantly, inherent in this definition is the concept that the tinnitus does not have to be totally covered by the masking sound in order for the patient to achieve meaningful relief.

Most importantly, however, is the fact that the achievement of success in a formal masking program requires a period of education wherein the patient gains an understanding of the nature of tinnitus, an understanding of the nature of sound, and an understanding of how external sound can be used in a variety of ways to achieve relief. Call it teaching, call it counseling, call it what you like – effective individualized patient education is as important to masking as it is to the various habituation-based approaches. It is virtually impossible to have a successful treatment protocol when the concept of success is not clearly defined and agreed upon by clinician and patient. Specifically as applied to tinnitus masking, in my opinion it is unwise and impractical to take the position that treatment success demands that the patient be completely unable to detect his or her tinnitus in the presence of the masking sound. Masking can indeed succeed beautifully under just such circumstances! Consider a room that is pitch black room save for a single candle burning brightly. Now turn the dimmers on part way in the room. The candle is still putting out
the same amount of watts, but it does not appear anywhere nearly as bright. The dimmers do not
totally mask the candle, but they certainly do take the edge off of the brightness. Is the light
emitted by the dimmers irritating? No, indeed the overall effect is soothing when compared with
a bright candle in an otherwise pitch black room. In just the same manner, partial masking can
take the edge off one’s tinnitus, thereby achieving a soothing effect that affords the patient
considerable immediate relief.

Tinnitus patients today have access several effective methods of bringing about relief while they
await the coming of "the cure." There are a variety of pharmacological approaches,
psychological modalities such as cognitive behavioral therapy, and neurophysiological
approaches such as TRT. And there is masking, including partial masking. While considering
some of the more esoteric approaches, it might be helpful to step back and reassess the value of
the immediate relief that can be achieved by the mere introduction of externally-generated broad
band sound.

I would like to end with a plea to the tinnitus patient and a plea to the tinnitus clinician. To the
patient: While waiting for somebody to develop an actual cure, please do not deny yourself the
significant benefits of tinnitus treatments that offer relief. Moreover do not fall victim to the
erroneous philosophy that any treatment falling short of offering total relief is not worthy of
consideration. Just because you have tinnitus ... does not mean you must suffer from tinnitus.
And to the hearing healthcare professional treating tinnitus patients: While there is nothing
wrong with having a "favorite" treatment approach, I implore you to remain open-minded.
Become familiar with several approaches; become facile with several approaches. Do not
subscribe to the "one size fits all" school of healthcare. Do not insist on using your favorite
approach upon a patient when there might be an easier, simpler, less expensive, or more direct
method of achieving the relief your patient seeks. Spend the extra time needed to discover what
will result in genuine patient satisfaction, bearing in mind individual variations and individual
needs. To achieve true success, then, treat the patient ... not the tinnitus.