Vocal masses

The term "singer's nodules" is an increasingly misused term. It has become a common diagnosis, but in reality, very few singers actually have these. It is not rare for a singer to come in for evaluation having had surgery for nodules, further demonstrating the incorrect diagnosis. The treatment for nodules is not surgery at all so it becomes important as a performer to understand the true nature of vocal masses. This allows you to be an educated consumer and advocate for yourself to prevent unnecessary surgery.

So why is it that performer's get labeled incorrectly with vocal nodules? And what exactly are vocal nodules? Again, your understanding of the anatomy will help the answers to these questions make sense.

Different pathologies occur at different locations within the vocal fold. Let's start first with the outer surface, or epithelium, which is the location of vocal nodules.

A common scenario may help you understand how these lesions form. You are a performer and you are in an engagement that requires you to do eight shows a week. Early in the week and early in the season, you are fine and you are very careful with your technique.

Your voice holds up initially. Then, you catch a cold or you are out late after the show, speaking over loud music or a crowd at a party or restaurant. Your vocal folds swell a little and you go into your next performance with a small amount of swelling. That swelling makes your vocal folds hit each other in a different way. You subconsciously start to compensate for this, whether this means using your muscles differently, supporting differently, or using breath differently.

Meanwhile, your vocal folds are still swollen and you are hitting them together with the same force as when they were not swollen. However, that force is too much for swollen vocal folds, and so where they hit becomes more swollen and continue to hit harder and harder. That swelling, over time, becomes a callous, just like on your hands if you use them too much. The part of your hands that you use (i.e., the pads of your fingers) become calloused. Similarly, the part of your vocal lining that hits first becomes calloused, and that spot is the most common spot for vocal nodules.

Now you have two firmer nodules and you continue to use muscles to force your voice through because you don't like the way your voice sounds. This only reinforces the formation of nodules. That is why speech therapy is the correct treatment for nodules. Reversing these behaviors will allow those nodules to heal, just like resting your hands will allowing your calluses to heal. You do not need to remove the calluses on your hands any more than you need to remove nodules from your vocal folds.

Take that same scenario as we just discussed but instead of swelling, you bleed a little into an area of your vocal fold. This area, it is thought, can form into a cyst, fibrotic (firm) mass, or other mass. This can occur anywhere on your vocal fold. This mass creates an irregular contour to your vocal fold, and that mass is the only thing that contacts your other vocal fold. This creates almost immediate change in vocal quality. Over time, that mass will continue to hit your other vocal fold and create swelling, and eventually a nodule on the other vocal fold. This is the exact same concept that we have already discussed for vocal nodule formation.

Unfortunately, these cysts and fibrotic masses are different than nodules. They do not respond to voice therapy. The usual treatment for such masses is surgical. Interestingly, though, speech therapy is still a critical component of treatment. Speech therapy accomplishes two major goals. The first is that it can shrink the mass itself and reduce swelling, because you are learning how to speak without forcing your voice. Correct technique will help you to avoid using your voice in such a way that it presses the mass against your other vocal fold. This will often also make that nodule disappear. The second major goal is to teach you the correct technique that you used to have but that your mass altered. This is so that when you have had the mass removed, you are not inadvertently using the same incorrect technique and pressing the newly-operated vocal fold again. This will help prevent scar formation at the surgical site. Therefore, speech therapy is a critical component of the pre-operative treatment plan.

Most masses fall into these two major categories. Even polyps and other vocal masses can be lumped together with cysts, in that they don't respond to speech therapy and require excision. The same principle of pre-operative speech therapy does apply. You want perfect technique going into surgery so that your post-operative result is ideal.

The unfortunate problem is that general otolaryngologists, lacking the sophisticated equipment to differentiate these masses, use the more crude flexible laryngoscope (through the nose). They see a bump on each vocal fold and call them nodules. As you now know, though, any fullness on one vocal fold, even from a cyst, can cause fullness on the other vocal fold. So what appears as two nodules are actually completely different, as are the treatments. But this misdiagnosis with inappropriate equipment has resulted in an overdiagnosis of vocal nodules.