
Nodules

Definition:

Nodules are bilateral (on both vocal folds), benign (not cancerous), soft swellings usually located at the junction of the front and mid section of the vocal folds. They can vary in size and can be acute or chronic. The acute form can be seen after an episode of prolonged voice trauma and may abate after several hours or even one day of voice rest whereas more chronic nodule may not respond favourably to voice rest. These established nodules can become -fibrosed which means there have been changes to the cellular structure of the vocal folds. Nodules usually affect the sound of the person's voice. Hoarseness with a reduced pitch range is the most common symptom.

Diagnosis:

Nodules can be detected via a mirror laryngoscope or nasendoscope under normal light but you cannot be 100% assured that this is the correct diagnosis without stroboscopic evaluation. A stroboscopic evaluation gives us an idea of the vibratory characteristics of the vocal folds. This is important with nodules because sometimes there may be an underlying cyst which looks like a nodule but is not in fact one. The vocal fold on the other side may have a reactive nodule (i.e. a small swelling that is a reaction to the trauma of colliding with the swollen vocal fold).

Causes:

It is commonly accepted that nodules are caused by faulty voice use patterns or vocal trauma. This may include using the voice in a strained way, yelling, speaking over background noise for long periods of time or singing in a less than efficient way. Nodules may also be seen after prolonged or demanding voice use in the absence of obviously faulty vocal technique. Some research has suggested that even opera singers can demonstrate soft nodular swellings immediately after a performance but that this can disappear within a few hours of singing.

Management:

Varies according to the size of the appearance of the nodules. The smaller, softer appearing nodules generally respond favourably to voice rest and to speech therapy that aims to decrease their size and eliminate the voice use patterns that may have caused them in the first place. More established nodules will also respond well to therapy but will need longer to recede. There are some cases that require surgical removal but this is rare and is only advised after therapy has been tried first.

