

# PREVALENCE OF VOICE DISORDERS IN SINGERS

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The purpose of this study is to describe the characteristics of singers consulting for voice disorders. We analysed medical files of 78 singers examined at the hospital “Gui de Chauliac” in Montpellier, in the Amy de la Bretèque’s unit, for a period of 15 months. Data related to age, gender, occupational status, singing training and experience, musical style, voice complaint, diagnosis, grade at the GRBAS scale and treatment were gathered.

First, the patients were mostly female singers (87%, N=68/78). 64% of the patients (N= 50) were non-professional singers (semi-professional included), 25% (N=19) were professional singers and 11% (N=9) were students of singing. Vocal endurance, somesthetic signs and difficulties to sing high pitches were the most frequent symptoms. Among the patients, 79% (N=62) presented singing voice disorders, being associated with vocal fold lesions for 87% (N=54/62) of this pathological population. Vocal fold nodules, associated or not with another diagnosis, appeared to be the most prevalent pathology (37 %, N=23). Sulcus was the second one (26%, N=16), followed by congenital-lesion suspicions (18%, N=11), sulcus glottidis (10%, N=6), functional voice disorders, Reinke’s oedema and vocal cyst (8% each, N=5). Half of the patients (55%, N=32/58) did not suffer from speaking voice disorders (GRBAS grade 0), even though half of them suffered from singing voice disorders (N=17/32). 31% (N=18/58) were evaluated with a GRBAS grade of 1, and 14% (N=8/58) a grade of 2.

Our research concerning the gender effect (mostly women) are similar to what has been observed for dysphonia (De Bodt et al., 2016; Remacle et al., 2016). The main symptoms identified in the current study (vocal fatigue and high-pitch difficulties) link with common singing-voice symptoms found in the literature (Fritzell, 1996; Rosen, et Murry, 2000). In agreement to previous studies, vocal-fold nodule is the first type of laryngeal disorders diagnosed in singers (Lamarche et al., 2010; Sarfati, 1997; Stepp et al., 2011), similarly to what is found for general population consulting in voice clinic (Remacle et al., 2016; De Bodt, 2015). However, the high occurrence of sulcus and other congenital-lesion suspicions is unusual in the general population consulting in voice clinic (Remacle et al., 2016; De Bodt, 2015). It seems to be specific for singers (De Saint Victor, 2010; Cohen et al., 2007). This is in agreement with the conclusions of Cornut and Bouchayer (2007) who claim that congenital lesions are common disorders in singers but hardly diagnosed. Intensive use of speaking and singing voice would favour a better detection of those vocal pathologies.

In conclusion, singing-voice problems occur more often in females than in males. Most of the singing voice disorders are associated with vocal fold lesions, the most commonly-diagnosed laryngeal pathology being vocal-fold nodules, followed by sulcus.

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