Letter to the editor in reference to: Vocal cord paralysis secondary to vincristine treatment in children: A case series of seven children and literature review.

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Dear Sir,

With great interest we read the article by Godbehere *et al* on vincristine (VCR)-induced vocal cord paralysis (VI-VCP) in pediatric patients.[1] The subject is clinically relevant and the authors provide a practical algorithm for diagnosing and treating VI-VCP. We strongly support early ENT referral following stridor in children to assess for potentially life-threatening complications of VCR administration.[2] Our recently published case report and literature review (in Dutch) have found similar type and onset of symptoms.[1-2]

In a recent review (published in Dutch literature, see **Table 1**) we summarized 22 studies including 45 patients, and we, remarkably, found some data that were slightly contrasting with findings of Godbehere *et al.* [1] First, we found that 11 out of 45 children between 5 and 17 years of age presented with VI-VCP, which suggests that airway obstruction might also affect older children following VCR administration. For example, one 16-year-old and one 17-year-old child needed ICU management and intubation respectively following VCR treatment. Six of the seven cases (85%) described by Godbehere *et al* [1] presented with bilateral vocal cord paralysis, which suggests that this is more common than unilateral paralysis. In contrast, we found that 26 out of the 35 cases (74%) that reported laterality presented with bilateral vocal cord paralysis. VI-VCP laterality was not reported in 11 cases, which could further affect this prevalence. Report of relatively more unilateral paralysis could consequently result in lower (overall) indication of invasive airway management.

Remarkably, in contrast to Godbehere *et al* [1] we found that dose reduction resulted in reversion of paralysis in four cases. Complete cessation of therapy might therefore not be needed in all cases (contrasting findings of Godbehere *et al* [1]. In addition, we retrieved six cases that showed partial recovery and even two cases showing no recovery.

We also found (**Table 1**) that respiratory support is not always needed to facilitate VCR continuation: 10 children with bilateral vocal cord palsy received VCR dose reduction and did not need invasive airway management. One 7-year-old child with bilateral vocal cord palsy even continued VCR at full dose. Finally, we found 3 cases receiving tracheostomy as airway management, but still required discontinuation of VCR treatment, indicating that invasive airway management does not always facilitate continuation of VCR treatment.

In conclusion, we agree with Godbehere *et al* [1]that awareness of this potentially life-threatening complication is essential. Maybe our Table 1 could facilitate implementation of treatment decision (trees) in patients suffering from VI-VCP.

References :

Godbehere J, Payne J, Thevasagayam R. Vocal cord paralysis secondary to vincristine treatment in children: A case series of seven children and literature review. Clin. Otolaryngol. 2021;46:1114-1118.

J.E. Swartz, H.P.H. Hundscheid, H. Bruijnzeel, *et al* . Vincristine-induced vocal cord paralysis: a rare but potentially life-threatening complication, Ned Tijdschr Oncol 2021;18:16-21.

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