

# Velopharyngeal Dysfunction: Recommendations for Use of Nomenclature

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**A review of literature relating to velopharyngeal dysfunction reveals that there is no consensus regarding the precise definition of the terms "velopharyngeal incompetence," "velopharyngeal inadequacy," or "velopharyngeal insufficiency." Since this represents an obstacle to communication among members of multidisciplinary teams concerned with rehabilitation of velopharyngeal problems, current usage of these terms is reviewed and recommendations for clarification of the nomenclature are provided.**

There appears to be no consensus in the literature regarding the precise definition of the terms "velopharyngeal incompetence," "velopharyngeal inadequacy," or "velopharyngeal insufficiency." Authors frequently have used all three terms interchangeably or they have used one term to encompass all malfunctions of the velopharyngeal apparatus. Often no distinction has been made between impaired function caused by deficiencies of tissue and those caused by the malfunctioning of properly proportioned tissues. Inconsistencies in terminology present an obstacle to communication among members of multidisciplinary teams concerned with rehabilitation of patients with velopharyngeal problems. The purposes of this paper are to present a review of selected literature regarding the current usage of these terms and to present recommendations for clarification of the nomenclature in order to minimize confusion and promote improved interprofessional communication.

## INADEQUACY

Standard English dictionaries are of no assistance in differentiating the three terms; the terms are generally used to define each other. Likewise, sources of medical and biological terminology offer incomplete differentiations.

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Mazaheri et al (1964) used "inadequacy" as an encompassing term. Hogan and Schwartz (1977) used "inadequacy" somewhat interchangeably with "incompetence," which was in turn used to encompass malfunctions of all types. Kipfmeuller and Lang (1972) differentiated among all three terms using "inadequacy" as a main descriptor to denote all types of velopharyngeal dysfunction. The other two terms were used to differentiate among problems of tissue deficiencies and impaired mobility. Bloomer and Wolski (1968) used "inadequacy" in a similar manner. Riski and Millard (1979) also differentiated among all three terms but used "insufficiency" as an all inclusive term. "Inadequacy" was used to designate tissue deficiency.

## INCOMPETENCE

"Velopharyngeal incompetence" is a widely used term. Hogan and Schwartz (1977) and others used "incompetence" to encompass malfunctioning of all types (Chalian et al, 1971; McWilliams, 1985; McWilliams et al, 1984; Randall, 1979). Pigott (1979) referred to incompetence in relation to function, but did not specify if tissue deficiencies were included. In contrast, many authors (Bloomer and Wolski, 1972; Riski and Millard, 1979; Kipfmeuller and Lang, 1972; Curtis and Beumer, 1979) used "incompetence" to delineate impaired movement. When not used in an encompassing manner, it therefore appears that "incompetence" has been used almost exclusively to designate problems of mobility.

## INSUFFICIENCY

"Velopharyngeal insufficiency" appears to be

the most widely accepted term that encompasses all forms of malfunctioning. For example, Riski and Millard (1979) used "insufficiency" as a main descriptor for all velopharyngeal dysfunctions, as did Blakeley (1964), Bzoch (1979) and Shprintzen (1979), although some authors used it to designate tissue deficiencies alone (Bloomer and Wolski, 1968; Curtis and Beumer, 1979; Kipfmueller and Lang, 1972). Furthermore, this descriptor is used as an encompassing term by the American Cleft Palate Association in their Craniofacial-Cleft Palate Bibliography. The Index to Dental Literature and the Cumulative Index Medicus use "insufficiency" in a similar manner.

### RECOMMENDATIONS

Since the use of nomenclature has been inconsistent, a case could probably be made for using the described terms in any number of ways, and literature could be found to support any such position. However, having three terms used in a redundant and contradictory manner hinders efficient scientific discourse, especially when the nomenclature is used by many members of a multidisciplinary team.

As used in the literature cited, the terms "velopharyngeal incompetence," "velopharyngeal insufficiency," and "velopharyngeal inadequacy" are usually used to describe functioning in a general manner. If one term was maintained as an encompassing term and the other two were used to denote either an anatomical deficiency or a neuromuscular malfunctioning, the nomenclature would allow for greater precision in communication. Of the three descriptors cited, "insufficiency" appears most universally accepted as an encompassing term. To avoid confusion in the literature, this term should be retained as an all-encompassing descriptor. When not used in an encompassing fashion, "velopharyngeal incompetence" has been used almost exclusively to denote impaired movement of the velopharyngeal apparatus and therefore, should be adopted to describe such dysfunctions. Consequently, "inadequacy" would be used to describe tissue deficiencies, following the usage of Riski and Millard (1979).

In the interest of clarity the following definitions of velopharyngeal function are recommended for adoption to standardize the nomenclature:

**Velopharyngeal Insufficiency:** Any malfunctioning that results in imperfect closure of the velopharyngeal apparatus. Velopharyngeal insufficiency includes both velopharyngeal incompetence and velopharyngeal inadequacy.

**(a) Velopharyngeal Incompetence:** Imperfect

closure of the velopharyngeal apparatus that is caused by a defect in neuromuscular functioning rather than a deficit of tissue.

**(b) Velopharyngeal Inadequacy:** Imperfect closure of the velopharyngeal apparatus that is caused by a deficit of tissue.

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