Accuracy of Self-Report in Detecting Taste Dysfunction

Abstract

Objective: To determine the sensitivity, specificity, and positive and negative predictive value of responses to the following questionnaire statements in detecting taste loss: “I can detect salt in chips, pretzels, or salted nuts,” “I can detect sourness in vinegar, pickles, or lemon,” “I can detect sweetness in soda, cookies, or ice cream,” and “I can detect bitterness, in coffee, beer, or tonic water.” Responses to an additional item, “I can detect chocolate in cocoa, cake or candy,” was examined to determine whether patients clearly differentiate between taste loss and flavor loss secondary to olfactory dysfunction.

Methods: A total of 469 patients (207 men, mean age = 54 years, standard deviation = 15 years; and 262 women, mean age = 54 years, standard deviation = 14 years) were administered a questionnaire containing these questions with the response categories of “easily,” “somewhat,” and “not at all,” followed by a comprehensive taste and smell test battery.

Results: The questionnaire items poorly detected bona fide taste problems. However, they were sensitive in detecting persons without such problems (i.e., they exhibited low positive but high negative predictive value). Dysfunction categories of the University of Pennsylvania Smell Identification Test (UPSIT) were not meaningfully related to subjects' responses to the questionnaire statements. Both sex and age influenced performance on most of the taste tests, with older persons performing more poorly than younger ones and women typically outperforming men.

Conclusion: Although it is commonly assumed that straight-forward questions concerning taste may be useful in detecting taste disorders, this study suggests this is not the case. However, patients who specifically report having no problems with taste perception usually do not exhibit taste dysfunction. The difficulty in detecting true taste problems by focused questionnaire items likely reflects a combination of factors. These include the relatively low prevalence of taste deficits in the general population and the tendency of patients to confuse loss of olfaction-related flavor sensations with taste-bud mediated deficits.

Link do artigo: https://onlinelibrary.wiley.com/doi/abs/10.1097/MLG.0b013e318161e53a