Ambiguity in documentation of the results of an Allen’s Test

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Rationale: In 1929, Dr. Edgar Van Nuys Allen developed a test which bears his name. The modified Allen’s Test allows practitioners to noninvasively assess the patency of the palmar arch, which connects the radial to the ulnar circulation. The performance of this test requires that the clinician apply sufficient external pressure to occlude both the radial and the ulnar arteries in a subject’s wrist, whereupon the patient forcibly forms a fist in order to blanch the palm. Then, the practitioner releases ulnar pressure, confirming the restoration of florid color to the subject’s entire palm. If the restoration of color to the palm is either delayed or displays a heterogeneous pattern (sparing the subject’s thumb and index finger), an incompetent palmar arch is presumed to be present. We have observed that a great deal of ambiguity exists with respect to documenting the results of a modified Allen’s Test. Some respiratory care practitioners (RCPs) chart “negative Allen’s Test” when they observe ample collateral palmar circulation following decompression of the ulnar artery, while others chart “positive Allen’s Test” when confronted with the identical clinical scenario. We were prompted to undertake an internet search in order to ascertain how the documentation of this test is typically taught, and discovered that respiratory therapy students are as likely to be instructed that good collateral palmar circulation correlates with a positive result as they are to be taught the diametric opposite interpretation.

Methods: We created a one-page questionnaire describing the performance of a modified Allen’s Test. This questionnaire was administered to a series of 82 RCPs, who were asked to select their interpretation of the results described on the questionnaire as “Positive Allen’s Test” or “Negative Allen’s Test”.

Results: When the results were tallied, 78 of 82 (95%) of the respondents chose the incorrect response, while 4 of 82 (5%) of those surveyed chose the correct response.

Conclusions: The documentation of “Positive Allen’s Test” or “Negative Allen’s Test” is so ambiguous as to be essentially worthless. Because the teaching of this concept is so often likely to be incorrect, we would respectfully suggest that the categorization of the result of an Allen’s Test as either “positive” or “negative” be abandoned. In lieu of entering either of these terms in the documentation section of a patient’s medical record, we would suggest that the RCP chart “Good collateral circulation” or “Poor/absent collateral circulation” instead. In the context of the ongoing and widespread implementation of electronic medical record (EMR) technology, the documentation analysts who build these systems need to be made aware of the results of this project. We suggest that this activity represents an opportunity wherein the design of EMR documentation workflow could be exploited to teach a practice which unequivocally enhances patient safety.

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