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Surgical versus percutaneous tracheostomy: an evidence-based approach.

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Abstract

The choice between surgical (ST) and percutaneous tracheostomy (PT) is not often based on evidence. The aim is to evaluate the quality of evidence in published articles comparing the two methods. A MEDLINE search was done. From 298 articles found, 37 fulfilled the inclusion criteria and 35 were further analyzed. No study was based on type I evidence, 13 (37%) represented type II, in 1 (3%) a clear-cut definition between type II or III was not possible and 21 (60%) represented type III or IV evidence. Taking into account the complication rate of the 13 type II evidence studies, 7 are in favor of PT and 3 in favor of ST. The majority of studies comparing PT with ST are of type III or IV level of evidence. Even if only type II studies are analyzed, outcomes are controversial. Any claims by clinicians in favor of a particular treatment are still debatable.