Early tracheostomy no aid for severe stroke outcomes

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Early tracheostomy does not significantly improve the rate of survival
without severe disability at six months for patients with severe stroke receiving mechanical ventilation, according to a study published online May 4 in the *Journal of the American Medical Association*.

Julian Bösel, M.D., from Heidelberg University Hospital in Germany, and colleagues evaluated whether early versus standard tracheostomy improved functional outcome among patients with stroke receiving mechanical ventilation. Analysis included 382 patients with severe, acute ischemic or hemorrhagic stroke receiving invasive ventilation who were randomly assigned (1:1) to early tracheostomy (within five days of intubation; 177 patients) or ongoing ventilator weaning with standard tracheostomy if needed from day 10 (189 patients).

The researchers reported that a tracheostomy (predominantly percutaneously) was performed in 95.2 percent of the early tracheostomy group in a median of four days after intubation and in 67 percent of the control group in a median of 11 days after intubation. There was no significant difference between the groups with respect to the proportion without severe disability at six months (43.5 versus 47.1 percent; adjusted odds ratio, 0.93; 95 percent confidence interval, 0.60 to 1.42; P = 0.73). Five percent of serious adverse events (six of 121) were related to tracheostomy in the early tracheostomy group versus 3.4 percent (four of 118 reported events) in the standard group.

"The wide confidence intervals around the effect estimate may include a clinically important difference, so a clinically relevant benefit or harm from a strategy of early tracheostomy cannot be excluded," the authors write.

Two authors disclosed financial ties to the pharmaceutical and medical technology industries.

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