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Titel des Beitrags: Muscle relaxant use for tracheal intubation in pediatric anaesthesia: a survey of clinical practice in Germany.

Abstract: OBJECTIVES: Aim of this Germany-wide study was to evaluate the use and application customs of neuromuscular blocking drugs (NMBDs) for tracheal intubation in children of age 5 years or younger. MATERIAL AND METHODS: In the year 2005, a total of 3260 questionnaires were sent out to all heads of anesthesia departments at all types of hospitals as well as ambulatory anesthesia centers in Germany. The fields covered by the questionnaire were regarding institutional size, amount of general anesthesia and specifically pediatric cases, number of intubations and NMBDs used, frequency of use of the individual relaxants and techniques utilized when administering muscle relaxants. RESULTS: Of the sent-out questionnaires 66.9% could be analyzed: 82% of hospitals use 1-3 muscle relaxants in children; 91% of the ambulatory anesthesia centers use a repertoire of 1-2 neuromuscular blockers for pediatric cases. However, general anesthesia with tracheal intubation in children is often induced without using any NMBD at all. Mivacurium is the predominantly used NMBD for pediatric intubation in Germany. In contrast, the use of succinylcholine is far less in ambulatory anesthesia centers than in hospitals. Despite controversial discussion, precurarization, priming, and timing are still utilized in German anesthesia practice. CONCLUSION: In Germany, mivacurium, with its
favorable pharmacologic profile for short cases, is the predominantly used NMBD for pediatric tracheal intubation. Despite the known adverse effects of intubation without muscle relaxation, this technique is also wide-spread, especially among German anesthetists in ambulatory anesthesia centers. Surveys like these are important to determine a status quo of use and application customs of NMBDs in pediatric anesthesia and provide a basis for numerous other studies.