

Studio APRICOT: confronto fra risultati italiani ed europei

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The **Anaesthesia Practice In Children Observational Trial (APRICOT)** study was a prospective, observational, multicenter, cohort study of children undergoing elective or urgent anesthesia procedures in 33 European countries.¹ The study identified the incidence, management, and outcome of perioperative severe critical events that required immediate intervention to prevent the occurrence of disability or death. This study revealed a higher incidence of respiratory severe critical events than previously reported in the literature, and – more importantly – a large variability in the practice of pediatric anesthesia at the 261 participating centers and 33 countries. These results warrant a thorough analysis before drawing any conclusion.

The final APRICOT exported dataset included 30,874 participants and 31,127 anesthetic procedures, with 188 children having more than one anesthetic procedure during the 2-week inclusion period. 1478 children (4.8%) had severe critical events. The total number of reported severe critical events occurring during or immediately after anesthesia was 1,637 (5.3% of the 31,127 procedures), with 1,335 children having one severe critical event, 127 having two, 14 children having three, and two having four. The estimate incidence of perioperative severe critical events was 5.2% (95% CI 5.0-5.5).

The publication of APRICOT was accompanied by a commentary² that questioned whether the results are representative, as 27% countries contributed 69% of the cases. There is no doubt that this representation may introduce some bias in the interpretation of the results. Of course, there are serious challenges whenever attempting to generalize findings from one Institution or country to another. However, the APRICOT Study already addressed some relevant questions about the anesthesia practice in children.^{3,4}

First of all, who should perform pediatric anesthesia? To answer this question, it is important to define the prerequisites for pediatric anesthesia training and education. The APRICOT results, supported with other evidence from the literature, declare with confidence that a specialist pediatric anesthesiologist must manage anesthesia procedures of children less than 3 years of age with an ASA-PS at least III, as well as of children with a medical history of prematurity, congenital disease, airway hypersensitivity (a composite risk factor with recent upper tract infection less than 2 weeks, wheezing in the last 12 months, asthma diagnosis, and passive smoking), snoring, and a medical condition presenting with fever or requiring medication. Independent of the presence of these risk factors, a specialist pediatric anesthesiologist should manage anesthesia procedures of children less than 3 years of age and must take in charge all healthy children less than 2 years of age.

References

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