

An update review of non-pharmacological interventions for assisting the induction of anaesthesia in children

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Objectives: Studies have shown that induction of general anaesthesia can be distressing for children. Non-pharmacological methods for reducing anxiety and improving co-operation may avoid the adverse effects of preoperative sedation. This poster addresses whether such methods can reduce children's anxiety, distress or increase their co-operation during induction of anaesthesia.

Design: Systematic review and meta-analyses were used to examine the effect of child and parental interventions to assist the induction of anaesthesia in children.

Methods: CENTRAL, MEDLINE, EMBASE, CINAL, PsycINFO and Web of Science databases were searched using MeSH terms. Paper titles were reviewed, abstracts and full copies of selected papers obtained. Inclusion criteria were as follows: randomized controlled trials of a non-pharmacological intervention implemented on the day of surgery; children aged less than 18 years presenting for induction of general anaesthesia. Data were pooled statistically where sufficient details were available.

Results: Searches identified 1624 papers. There were 28 trials (2681 children) investigating 17 interventions of interest, which were included with outcome measures such as YPAS, VAS, STAI, APAIS, CARS, CSWQ, FAS, FLACC, HCAQ. Clowns or clown doctors, a quiet environment, video games and computer packages showed improved co-operation in children. However, parental presence did not significantly reduce child anxiety at induction.

Conclusions: This update review highlighted that the presence of parents during induction of general anaesthesia does not diminish their child's anxiety. Potentially promising non-pharmacological interventions such as parental acupuncture; clowns/clown doctors; playing videos of the child's choice during induction; low sensory stimulation and hand-held video games need further investigation in larger studies.