Although the incidence of aspiration is quite low, it remains a serious and potentially preventable complication of anesthesia (1,2). Thus, preoperative fasting, or being NPO (nil per os), is a mainstay of attempts to minimize this risk. In the cases of elective anesthetics in children, patients and caregivers receive instructions about preoperative fasting from many different sources based on ASA guidelines (3). Despite these instructions, anesthesiologists notice that parents seem to fast for longer than guidelines require. This results in hungry, cranky, fussy infants and children. Therefore, we wish to better understand how caregivers make decisions regarding preoperative fasting for their children. The primary objective of our study was to determine if children truly fast for longer than required, and our secondary objective was to determine the reason why this occurs.

Methods

We administered an RSRB approved survey to caregivers of pediatric patients undergoing elective procedures at our Pediatric Surgical Suite. This survey addressed our primary and secondary outcomes, collected participants’ ages, source(s) of their preoperative instructions, and the time of day they were instructed to arrange. Survey answers were managed in the Research Electronic Data Capture (REDCap) tool hosted by University of Rochester.

Primary Outcome: Is Our Suspicion True?

- 347 surveys from caregivers of patients ages 1mo-18yrs.
- 88% of patients were found to be NPO for food longer than 8hrs before arrival, but not significantly longer.
- 85% were NPO for clears longer than 3hrs.

NPO: Food longer than ASA guideline 275/311=88%
NPO drink longer than ASA guideline 248/293=85%

Why is this happening?

- Parents are being instructed to keep children NPO for clears for far longer than the 3hrs that is our requirement: n= 313, mean = 333 (min), standard deviation= 165 (min) A one-sample t-test shows this is significantly longer than 3 hours (p-value<0.0001). Instruction times for food are not significantly different than the required 8hours: n= 327, mean = 479 (min), standard deviation= 162 (min) (p-value<0.89).
- Parents report that eating or drinking closer to the "last allowed" time does not fit into their child’s schedule, so they do not do this.

Oh No! How Long Have They Been NPO?

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References