

Preoperative fasting: reviewing concepts and behaviors

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The CABG procedure is a widely used and accepted for the treatment of coronary artery disease and, despite decades of evolution and refinement, it remains in continuous technical development, helping the patient recover faster and reduce comorbidities and mortality. The use of practices and evidence based on consistent treatments and putting into practice clinical protocols to implement guidelines have been shown to be allied to clinical practice and beneficial to patients as a whole. Despite the advances achieved by modern Medicine, there is a lot to be done to test new hypotheses or question old knowledge, which so often were considered definitive. This need for periodic reevaluation of conduct and protocols, combined with restlessness and questioning spirit of the medical researcher, are responsible for considerable advances in Medicine, not regarding their impact or scope.

The preoperative nutritional assessment and follow-up have increased postoperative outcomes of patients undergoing surgical procedures. Prevention of gastric aspiration and demonstration of safety in the administration of liquids enriched with carbohydrates and / or protein have changed handling preoperative patient. Moreover, the increasing presence of studies demonstrating remarkable comfort and benefit to the patient in the search for direct evidence to support the strategy effectiveness [1,2]. During the last decades, a series of studies were published addressing the preoperative fasting, with promising results and publications of guidelines such as the European Society of Anesthesiology [3]. Rather than reducing the

recommended fasting time, these policies began to encourage the intake of fluids (water, juices without pulp or even tea and coffee) until two hours before the scheduled procedure, with some restrictions for cesarean section [3 -5]. Some members of the guidelines consider the possibility of adding milk to tea or coffee, not exceeding 20% of the total volume, but the evidence about the safety of this practice still need more conclusive studies [6,7]. Drinks made predominantly from milk should be considered as solid [3].

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The intake of liquid without residue, whether or not enriched with carbohydrates, as well as gastric emptying were tested in various studies [2,8,9]. The use of carbohydrates allowed an early insulin response, similar to that occurring after ingestion of a meal [3] and delivery of liquid with added maltodextrin (not necessarily all carbohydrates), even for diabetic patients, seemed to be in good conditions until 2 hours before surgery, improving the welfare of the patient and reducing the sensation of hunger and thirst, in addition to postoperative insulin resistance [10].

Dietary interventions represent a promising and attractive area for the perioperative period. The permission to intake clear fluids, enriched or not with carbohydrates, has focused on safety, metabolic effects, welfare and perioperative postoperative hospital stay [3].

The increased research in the field of cardiac surgery such as the article written by Feguri et al. [11], "Results of clinical and metabolic effects of fasting with carbohydrate in coronary artery bypass grafting," and the deepening of the concepts briefly described have great therapeutic potential due to the low cost and easy implementation in daily practice.

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