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Editorial

Nutrition in the Surgical Patient[☆]

Nutrición en el paciente quirúrgico

It has been well established and documented that malnutrition is an independent negative factor associated with post-surgical complications, mortality, and prolonged hospital stay and, therefore, higher healthcare costs. In addition, malnutrition is often associated with pathologic situations such as cancer, chronic inflammation or organ dysfunction that increase the risks of surgery.¹

The objectives of perioperative nutritional support are: to minimize the negative protein balance, which avoids malnutrition; to maintain immunological function, thus improving postoperative recovery; to reduce intestinal function recovery time; and, to shorten hospital stay.²

In recent years, many changes have been proposed for the preoperative management of surgical patients to aid in faster recovery. The most revolutionary idea has probably been “fast-track surgery”, which has meant that the classical indications for nutritional support have been restricted to an ever-smaller group of post-surgical patients.³

The application of these new practices is rather heterogeneous, probably due to the fact that it is a process that goes beyond classic nutrition and entails changes in anesthesia management, hydration, analgesia, surgical techniques and immediate post-op patient management.

In this scenario, specialized nutritional support is reserved for malnourished patients with a high risk for developing post-surgical complications that are identified as having had a weight loss of more than 5%–10% in the last 3 months, low body mass indices (BMI) (≤ 18) or diagnoses of diseases that present with a high degree of inflammation.

Nutritional Support and Nutrients

Better knowledge about the functions of the gastrointestinal tract for maintaining immunological capacity together with advances made in nutritional techniques (new enteric access approaches, modifications in the provision of nutrients and

the appearance of new enteral nutrition formulas) have made it possible for enteral nutrition to be currently the choice in the majority of surgical patients.¹

Nutritional support prior to surgery only makes sense in very malnourished patients and, even in these cases, parenteral nutrition should be reserved for when enteral nutrition is impossible or the malnutrition is very severe.

In the postoperative period, it is recommended to reinstate oral-enteral intake as soon as possible. Parenteral nutrition, in the absence of important malnutrition, should only be used in patients with postsurgical complications that alter intestinal function, impeding the absorption of adequate quantities of nutrients during the 5–7 days after surgery.

With regard to nutrients, the initial approaches that were based on aiming caloric and protein intake at re-establishing the nitrogen balance and covering the calculated caloric needs according to the degree of catabolism have slowly been left by the wayside. In recent years, the evidence has been aimed at avoiding the problems derived from metabolic overload. That is to say that the strategy has been based on substituting quantity for quality by introducing value-added nutrients: “immunonutrients” or “pharmakonutrients” such as glutamine, arginine and omega-3 fatty acids.² Some of the indications of these products are compiled in the current clinical guidelines with a high degree of evidence.

The Surgical Team

In elective, scheduled surgery, regardless of the existence of specialized nutritional support teams, the surgical team itself should be able to identify malnutrition in order to try to prevent postoperative complications associated with a poor nutritional state. The identification of these patients can be done by applying basic tools such as the nutrition assessment test, BMI scales, preoperative albumin levels or a combination of these.

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After the identification of the malnutrition, the implementation of simple protocols could contribute, in some cases, to the arrival of the patient for surgery with a more appropriate nutritional state.

As for the pre- and postoperative periods, there is also the idea of shortening the fasting times as much as possible. The recovery of digestive transit is key in the recovery of the immunological system and, therefore, essential for recovery after the procedure.

Conclusion

In recent decades, clinical nutrition has grown in importance and there are more and more professionals who, from a multidisciplinary viewpoint, work to achieve an adequate patient nutritional state. The surgical team should be proactive in identifying malnutrition and in the rational use of nutritional therapy. A good way to promote this attitude is by sharing the established evidence about nutrition and its indications in specialized surgery medical journals.

This issue publishes a good, detailed review dealing with perioperative nutritional support in gastrointestinal pathologies. The authors review the guidelines that the main European and American scientific societies propose for the nutritional treatment of these patients, with their corresponding degrees of evidence. The article discusses how we should forego the idea of prolonged patient fasting in order to obtain better postoperative results. Lastly, the authors discuss the possible roles of immunonutrition and which gastrointestinal

surgery patients obtain greater benefits from this type of nutrition.

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