Abstract

Objective: Verify whether the postoperative fasting period increases the risk for infection and prolonged length of stay. Methods: Prospective cohort study. Elective surgery patients were included. Excluded: those with no conditions for nutritional assessment, admitted in minimal care units, as well as with <72h in-hospital stay. Postoperative fasting was recorded from the days of no nutrition therapy. The length of stay was considered prolonged when above the average according to the specialty and type of surgery. Logistic regression was used to assess associations and adjust for confounding factors. Results: 521 patients were analyzed, 44.1% were fasted for a period 1 day, 91% for 3 days and 5.6% for more than 5 days. Patients with more than 5 days fasting were more eutrophic, more admitted to intensive care units, and had more postoperative surgical complications. After adjustment for confounding variables, it was noted that 1 day of postoperative fasting increased the infection risk by 2.04 (CI95%: 1.20 to 3.50), 3 days 2.81 (CI95%: 1.4-5.8), and in fasting for more than 5 days the infection risk was 2.88 times higher (CI95%: 1.17 to 7.16). The risk for prolonged hospitalization was 2.4 (CI95%: 1.48 to 3.77) among patients who had 1 day fasting, 4.44 (CI95%: 2.0 to 9.8) and 4.43 times higher (CI95%: 1.73 to 11.3) among patients with 3 days fasting and more than 5 days, respectively. Conclusion: The longer duration of postoperative fasting was an independent risk factor both for infection and for prolonged hospital stay.

Keywords

Fasting, Surgery, Nutritional Status, Infection, Length of Stay.