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P-073 ENTERAL ABSORPTION OF A SOLUTION WITH HIGH DOSE ANTIOXIDANTS AND GLUTAMINE EARLY AFTER UPPER GASTROINTESTINAL SURGERY

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Rationale: Early micronutrient supplements modulate inflammatory and immune responses after injury and surgery. Vitamin and trace element supplements have been provided intravenously in different trials. The present study aimed at testing the enteral administration of large doses of antioxidant micronutrients and glutamine dipeptide early after intestinal surgery

Method: Open supplementation trial after surgery requiring jejunal feeding. The nutrients were combined in a single 500 ml solution: glutamine 30 g, Se 300 μ g, Zn 20 mg, vit.C 1.5 g, vit.E 500 mg, β -carotene 10 mg per day (Intestamin, Fresenius Kabi), started within 6 hours of surgery, for 4-5 days. Lab: preop, days 1 and 5 postop

Results: 12 patients aged 62 ± 13 yrs were enrolled. The postop. inflammatory response was reflected by elevated CRP compared with preop. values(17 ± 28 mg/l, D1: 57 ± 60 , D5:119 ±50). The micronutrient concentrations decreased on day 1 (p < 0.01: as a result of inflammation and fluid dilution), to increase thereafter, remaining within reference ranges: there was no increase from preop values

	Vit C umol/l Ref:20-50	Selenium ug/l Ref:51-140	Glutamine nmol/l Ref:655±172
Preop	16.7 ±15.5	74 ±26	520 ±94
Day 1	6.3 ±4.4	50 ±29	357 ±67
Day 5	23.4 ±10.3	71 ±28	389 ±79

Micronutrient changes over time

Conclusions: Enteral large dose micronutrient intake was associated with the correction within 5 days of the low postop. values. Concentrations on day 5 did not differ significantly from preop. values, which is probably due to the persistent inflammation reflected by the elevated CRP. Further outcome studies are required to investigate the clinical impact of the micronutrient supplements.