

Elective Laparoscopic Sigmoidectomy Reduces IL-6 Serum Levels in Uncomplicated Recurrent Diverticulitis

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Abstract

Introduction: Although recurrent diverticulitis appears to be a chronic relapsing disease from a clinical standpoint, there are no sufficient data about inflammatory markers that allow monitoring recurrent diverticulitis in the quiescent phase. Our hypothesis is that serum inflammatory markers may be increased during clinical quiescent phases of diverticulitis and will drop after elective laparoscopic sigmoidectomy for uncomplicated recurrent diverticulitis. We also believe that a drop in IL-6 levels across surgery could be related to an improved quality of life.

Material and Methods: This epidemiological study aims to evaluate IL-6 serum levels and quality of life preoperatively and 6 months after surgery in 30 patients undergoing elective laparoscopic sigmoidectomy for uncomplicated recurrent diverticulitis.

Results: The mean preoperative IL-6 level was 9.5 ± 9.2 pg/ml (range 0-5), while at six months after surgery the mean IL-6 was 4.5 ± 3.5 . ($p=0.0085$). Preoperative QoL measured with the GIQLI questionnaire was 98 ± 11.3 and raised significantly after surgery to 112 ± 9.8 ($p=0.043$).

Conclusions: We found a serum IL-6 reduction after elective laparoscopic sigmoidectomy that can be attributed to the surgical removal of the source of inflammation in patients suffering from uncomplicated recurrent diverticulitis. Similarly, the GIQLI questionnaire showed a significantly improved QoL after surgery.

Key words: sigmoidectomy, diverticular disease, recurrent diverticulitis, IL-6, laparoscopy, GIQLI