

## Near Adhesion-Free Reconstructive Pelvic Surgery: Three Distinct Phases of Progress Over 23 Years

Thomas W. Hilgers, M.D., Dip. ABOG, ABLs, SRS

### Abstract

**Background:** A somewhat pessimistic view on the prevention of postsurgical adhesions has developed over the years because rigorous surgical approaches may still result in the formation of postsurgical adhesions. In addition, postsurgical adhesion formation is associated with a significant degree of long-term morbidity. In this article, a surgical technique is presented which allows patients with the most extensive form of pelvic adhesions to undergo reconstructive pelvic surgery with a near-adhesion-free postoperative outcome. **Purpose:** This study was undertaken to assess the effectiveness of a comprehensive, well-defined set of surgical techniques with well-defined additions and subtractions in surgical technique over a period of 23 years and three distinct phases of implementation. This work was a systematic comparison of three case series evaluated sequentially over time. The three surgical protocols were each completely standardized. **Materials and Methods:** This was a systematic comparison of three distinct case series of patients who had extensive pelvic adhesions. Three distinct and standardized surgical protocols were prospectively introduced and adhesion scores before and after surgical treatment were assessed and statistically compared for each of the three case series. **Results:** Ninety-five (95) patients with extensive pelvic adhesive disease due to endometriosis or pelvic inflammatory disease participated in this assessment. They were chosen because of the extensive nature of their pelvic and adnexal adhesions. There were 26 patients in phase I (1987-1993), 44 patients in phase II (1994-2005), and 25 patients in phase III (2006-2009). Using the American Fertility Society scoring system for adnexal adhesions, the total adhesion score decreased from 33.8 to 18.1 in phase I, from 33.3 to 6.0 in phase II, and from 33.2 to 2.5 in phase III. Each decrease was statistically significant within each phase ( $P < 0.001$ ). Further, a statistically significant decrease in subsequent adhesion scores ( $P < 0.01$ ) was observed at the time of second-look laparoscopy, when comparing phases I to II, II to III and I to III, with the lowest scores obtained with the phase III surgical techniques. **Conclusions:** With the use of a comprehensive, well-defined set of surgical antiadhesion techniques, it is possible to perform, adhesion-free or near adhesion-free reconstructive pelvic surgery. (J GYNECOL SURG 26:31)