The main topic of the third international laparoscopic meeting held in May 1996 in Bern was the pathophysiology and therapy of gastroesophageal reflux disease (GERD) [1]. Not only the surgical therapy with the new minimal invasive techniques, also the medical management as well as the therapy of Barrett’s esophagus were discussed. The conclusion was that if a clear surgical indication is present, the laparoscopic Nissen fundoplication represents the therapy of first choice today. The lack of valid scientific clinical data makes the progress of laparoscopic surgery slower. Even laparoscopic cholecystectomy (LC), which is considered to be the ‘golden standard’ therapy of symptomatic gallstone disease [2], is of concern. A recently published randomized series from Sheffield [3], comparing LC versus small-incision cholecystectomy, showed no significant differences regarding postoperative pain, length of hospital stay and convalescence. LC took longer and was significantly more expensive. In the literature only some randomized data are available which could convincingly establish a clear advantage of the laparoscopic technique. This applies to appendectomy, laparoscopic hernia repair [4] as well as to LC in particular [2]. Nevertheless, further new methods and techniques are uncritically introduced to be performed laparoscopically without the backup of scientific data. This is particularly true for oncological surgery (colon, rectum, pancreas) where scientific data practically are not available [5]. For this reason such controversial topics were discussed in a special session of our international meeting. The summary of this discussion is presented as five update papers in this issue.

The first update from Vogelbach, Basel, shows the controversy in the therapy of stones in the gallbladder and the common bile duct. LC seems to be the ‘golden standard’ therapy of symptomatic gallstones whereas ERCP with papillotomy is the therapy of choice to remove stones of the common bile duct.

The second update from Petropoulos, Fribourg, is about laparoscopic colon surgery. Nonrandomized data from 209 patients (151 with benign and 58 with malignant disease) are presented. The advantages of the laparoscopic approach are that food intake can be started within the first 24 h postoperatively, the short overall hospital stay as well as the decreased convalescence time and off-work time. Implant metastases appeared in the malignant group with an incidence of 3.5%. His conclusion was that laparoscopic colon surgery seems to show advantages in the therapy of benign disease and that therapy of malignant disease cannot be recommended.
The third update from Himpens and co-workers, Brussels, gives an overview of laparoscopic hernia repair. The Nyhus classification should always be used, followed by an individual hernia repair according to the type of hernia. A type 2 hernia can be repaired by an inner ring closure using nonabsorbable sutures without a mesh, whereas all type 3 and 4 hernias may be repaired by inserting a preperitoneal mesh. The TEP (total extraperitoneal) technique is preferred to the TAPP (transabdominal preperitoneal) and his results are presented with a short-term follow-up time.

The fourth update from Schlumpf’s group, Zürich, discusses the laparoscopic therapy of morbid obesity. His own experiences with ‘gastric banding’ are presented and critically analyzed in comparison with published data. This technology seems to offer advantages for the patients in the short-term follow-up. Long-term results as well as randomized data, however, must be awaited until a definite verdict may be formed.

The last update from Perissat, Bordeaux, contains an overview about laparoscopic surgery and the future. All common laparoscopic techniques are reviewed, organ for organ, and their advantages and disadvantages discussed. The future will contain new, expensive and advanced techniques which may only be performed in a few specialized centers (question of money and human resources).

The future of laparoscopic surgery remains unclear. Only randomized data with a sufficient number of patients or meta-analysis can answer the question where the advantages of the laparoscopic technique are in comparison with the open approach. We hope that the publication of these five updates can contribute to controversial topics such as laparoscopic hernia or colon surgery and point out where today’s trend of laparoscopic surgery lies.

References
