IS-16
Clinical evaluation of laparoscopically assisted endorectal pull-through in Hirschsprung's disease: Comparison of transabdominal and perineal approach

Department of Pediatric Surgery, Osaka Medical Center for Maternal and Child Health

Akio Kubota, Hisayoshi Kawahara, Hiroomi Okuyama, Takaharu Oue, Yuko Taduke, Natsumi Tanaka, Hisazumi Uenaka

Background/Purpose: Laparoscopically assisted primary endorectal pull-through (EPT) via a perineal approach has been increasingly reported for Hirschsprung's disease (HD). However, functional evaluation after this relatively new approach is not well documented. The purpose of this study is to compare the stooling findings after EPT between a conventional trans-abdominal approach (TA) and the perineal approach using prolapsing technique (PA).

Materials/Method: Forty-one cases of HD are included in the study. Twenty of them underwent EPT with TA (Group O) and 21 with PA employing prolapsing technique (Group L). Spontaneous defecation is defined as stooling without treatment more than once per two days. Soiling is defined as small amount of involuntary stooling besides enough amount of stooling once a month or more.

Results: The incidence of postoperative enteritis was the same in the two groups (28% vs. 27%). In two cases of Group L, anorectal myectomy for intractable constipation was performed, however, there was no significant difference of re-operation rate between the two groups. At 3 years after the surgery, spontaneous defecation was obtained in 87% of Group L and 70% of Group O (no significant difference), soiling rate was significantly lower in Group L than Group O (14% vs. 45%, p < 0.05).

Conclusion: Spontaneous defecation after an EPT with PA for HD is compatible with results obtained with TA in the intermediate-term follow up period, however, soiling rate is significantly lower in cases with PA. This suggests that EPT with PA can provide a better long-term outcome than that with TA.