

Original Research Article

Pain at the First Post-hemorrhoidectomy Defecation Is Associated with Stool Form

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Abstract

Objectives: Post-hemorrhoidectomy defecation pain is problematic, and pain associated with the first defecation is particularly important for patients. The present study aimed to investigate whether stool form consistency affected defecation pain after hemorrhoidectomy.

Methods: A prospective, cohort, observational study where patients scheduled for hemorrhoidal surgery were analyzed. This study used two patient-reported scales to study parameters based on the first postoperative defecation. The Bristol Stool Form Scale (BSFS) and visual analog scale (VAS) assessed stool consistency and defecation pain. The association between stool consistency and defecation pain intensity was assessed using multiple linear regression analysis. Where there was evidence of non-linearity, we applied a restricted cubic spline with three knots to explore the non-linear association. We performed a non-linear regression analysis to estimate the association.

Results: A total of 179 patients were analyzed. The regression model results demonstrated that these scales negatively correlated with statistical significance ($p = 0.003$).

Conclusions: This study showed that the softer the stool, the less painful the defecation. Surgeons should attempt to induce a patient to avoid hard stool after surgery.

Trial registration: The Ethics Review Committee of the Japan Medical Association approved the study. The study was registered with the Japan Registry of Clinical Trials (jRCT1030190224, <https://jrct.niph.go.jp/latest-detail/jRCT1030190224>).

Keywords

hemorrhoidectomy, postoperative pain, stool form scale, defecation