

SUMMARY

'The effects of topical mitomycin-C on stricture formation in experimental corrosive esophagitis model'

Introduction: The stricture formation is the most important problem in treatment of corrosive esophagitis. Although a number of agents have been tried experimentally to prevent strictures, few have gained clinical application. The purpose of this study was to investigate the effectiveness of Mitomycin-C which inhibits fibroblastic proliferation on preventing strictures in a non-invasive experimental corrosive esophagitis model.

Material and methods: Thirty rats were allocated into three groups. A catheter system was placed into esophagus to create caustic burn. The rats in group 1 were instilled only with water. Group 2 rats were injured with %40 NaOH solution and untreated. The rats in groups 3 were injured and applied topical mitomycin-C. After 21 days, the rats were sacrificed and esophagus totally excised. The inflammation, granulation and collagen deposition were histopathologically evaluated.

Results: In the control group there was no inflammation, granulation and collagen deposition. The inflammation and granulation were detected in both group 2 and 3. There was no significant difference between group 2 and 3 statistically. The greatest accumulation of collagen was found in Group 2, followed by Group 3. The difference between group 2 and 3 in collagen deposition was significant statistically ($p < 0.05$).

Conclusion: Topical mitomycin-C has benefit effects in treatment of corrosive esophagitis.