ANTI-ADHESIVE EFFECT AND SAFETY OF SODIUM HYALURONATE-CARBOXYMETHYL CELLULOSE MEMBRANE IN THYROID SURGERY

Woo, Jung-Woo¹; Lee, Kyu Eun¹; Suh, Yong Joon¹; Paek, Se Hyun¹; Chai, Young Jun¹; Kim, Sujin¹; Youn, Yeo-Kyu¹; Koo, Do Hoon²; Kwon, Hyungju³; Choi, June Young³; Kim, Kyu Hyung³

¹Department of Surgery, Seoul National University Hospital, Seoul, Korea, Republic of; ²Department of Surgery, Seoul National Boraeme University Hospital, Seoul, Korea, Republic of; ³Department of Surgery, Seoul National University Bundang Hospital, Seoul, Korea, Republic of

Background/Purpose: A number of researchers have suggested the use of sodium hyaluronate carboxymethyl cellulose (HA-CMC) membrane for preventing postoperative adhesion. This study evaluated the anti-adhesive effect and safety of HA-CMC membrane in thyroidectomy for papillary thyroid cancer.

Methods: One hundred sixty two patients who underwent thyroidectomy were prospectively randomized. In the study group of 80 patients, 7.5 x 13cm HA-CMC membrane was applied to the operative field after thyroidectomy. The subjects were asked about complications including adhesive symptoms using a 8-item questionnaire at 2 weeks, 3 months and 6 months after surgery.

In addition, items on the appearance of neck wrinkles and scars were evaluated by a physician who had no information about patient’s allocation.

Results: There were no significant differences in complications such as swallowing difficulty, and wrinkle between study group and control group. Both group showed significant decreased scores with time in swallowing difficulty, and wrinkle. There were no complications related to the HA-CMC solution.

Discussion & Conclusion: The HA-CMC membrane did not decrease subjective or objective postoperative adhesion in patients undergoing thyroid surgery, although it was biologically safe.