

## **Interval Appendectomy Reduces Postoperative Hospital Stay in Patients with Uncomplicated Appendicitis**

Mitsugi Shimoda<sup>1</sup>, Naoki Orimoto<sup>2</sup>, Yu Kuboyama<sup>1</sup>, Shuji Suzuki<sup>1</sup>

<sup>1</sup>Department of Gastroenterological Surgery, Tokyo Medical University, Ibaraki Medical Center, Ibaraki 300 0395, Japan

<sup>2</sup>Department of Gastrointestinal and Pediatric Surgery, Tokyo Medical University, Tokyo, Japan

### **Abstract**

**Aim:** Acute appendicitis is frequently encountered in gastroenterological field, and emergency appendectomy (EA) has been the principal treatment for those patients. In recent years, interval appendectomy (IA), which performs elective surgery after conservative treatment, has been widely accepted. However, guidelines for the adaptation of IA have not been established yet, and its effectiveness is still unclear. The purpose of this retrospective study is to evaluate IA or EA as the best practice for patients with acute appendicitis in our department.

**Methods:** From January 2017 to March 2021, we had 98 cases of appendectomy and divided those patients into two groups, IA group and EA group, and compared the pre-operative, surgical, and postoperative factors among both groups.

**Results:** There were 20 patients in the IA group and 78 patients in the EA group. Over 95% patients underwent laparoscopic appendectomy. In IA group, there were 10 females and 10 males, and the median waiting time till appendectomy was 51.5 days (14-172 days). In comparison between two groups, length of hospital stay after surgery was significantly shorter in IA group than in EA group (IA group; 5 days (3-7) vs EA group; 6 days (3-41),  $p = 0.01$ ). The operation time was tended to be shorter in IA group than EA group, but was not significantly different. There was no difference between both groups regarding post-operative complications.

**Conclusion:** We suggest IA to be the preferred treatment method as it may shorten post-operative hospital stays for patients with acute appendicitis.

**Key words:** acute appendicitis, emergency appendectomy, interval appendectomy