

(+) followed appendectomy. (2) Reducement of transit time was recognized in 10 cases (30%) among 30 patients of SMON (+) appendectomy (+), and in 7 (16%) of SMON (+) appendectomy (-). Similar data were got in cases of SMON (?) groups. This facts mean the transit time is not influenced by appendectomy in non-SMON patients, while it is accelerated by appendectomy in SMON cases. (3) As for the subjective symptoms in case of SMON (+) appendectomy (+) showing acceleration of transit time, diarrhoea is observed in 2, abdominal pain in 2, uncomfortable feeling in 2, and nothing of any subjective symptoms in 2 among 10 cases. Among the groups of SMON (+) appendectomy (-), constipation 2, abdominal pain 1, indefinite symptoms 2, and no symptoms 2 in every 7 cases. Among 7 patients of SMON (-) appendectomy (-), diarrhoea was observed in 4 cases.

From these findings, diarrhoea is often observed as a cause of acceleration of transit time in non-SMON groups, but it is recognized unexpectedly in a few of cases of SMON groups., moreover it was cleared that cases of SMON (+) followed appendectomy reveal the acceleration of transit time and non-SMON patients followed appendectomy show no acceleration.

#### Summary

As the results of our investigation, we thought that the acceleration of transit time of contrast media in small intestine is related to appendectomy, regardless of diarrhoea as subjective symptoms, in SMON cases, while diarrhoea is essential cause in non-SMON cases and appendectomy is not so related to acceleration of transit time.

### 3. A METHOD OF INDICATION OF EMERGENCY OPERATION FOR ACUTE APPENDICITIS

*Surg. dept.*, T. Wakabayashi, K. Saito, K. Katumata  
*Path. dept.*, T. Suzuki

*Tokyo Metropolitan Police Hospital*

A study was made on whether or not emergency operations were a necessity in acute appendicitis. The method used pressure was applied to the right tender lower abdomen with the right hand and at the same time pressure was applied to the Adison point (the center point between the umbilicus and the xyosdeal processus). At this time if the pain at the tender point of right lower abdomen disappeared or became milder this was considered Adison point positive or W-H symptom positive (W-H=Wakabayashi-Hashizume).

The relation between the macroscopic findings of the resected appendix and the W-H symptom in 276 cases of acute appendicitis was studied. W-H symptom positives were found in 44.5% of the catarrh form of appendicitis, 57.6% of the hemorrhagic form, 61.0% of the phlegmonous form, 90.0% of the recrotic form and 100% of those perforated. In other words W-H positive is the sign that there is severe inflammation.

The same results were obtained in the histological findings.

I believe that this W-H symptom is an important sign in determining whether or not an emergency operation for acute appendicitis is necessary.

### 4. CONCOMITANT APPENDECTOMY

K. Makino, S. Nakamura, T. Soma, T. Kawamura, S. Arai

*Department of Surgery, Tokyo Medical College*

Disagreement between clinical findings and operative findings upon appendectomy is a common experience among surgeons. During the past four years we have conducted one thousand and several hundred appendectomies to study the relationship between clinical and operative findings, serum enzymes which have scarcely been reported and histological findings and obtained interesting results.

No definite conclusion has been drawn concerning the concomitant appendectomy upon

laparotomy due to other reasons. As the result of histopathological examination of these appendices removed upon non-specific appendectomy concomitant to laparotomy, positive changes were seen in a considerably high percentage, 76.3%.

## 5. CLINICO-PATHOLOGICAL OBSERVATION OF APPENDICITIS: ESPECIALLY, RELATIONS OF PATHOLOGICAL FINDINGS TO POSTOPERATIVE COMPLAINTS

T. Fuse et al.  
*Mishuku Hospital*

### SUMMARY

349 cases of appendicitis were investigated symptomatically and histopathologically. The authors came to know that there was the relationship between histopathological classification for severity and complaints recorded during postoperative course.

Results obtained are as follows:

1. Inconsistency rate between clinical and pathological diagnoses was 18.8%.
2. Incidence of light appendicitis was more widely distributed among female patients than males, and also in the younger generation than the older.
3. postoperative complaints were more constantly made by patients with light appendicitis than severe one.
4. Therefore, surgical attention should thoughtfully be drawn to light appendicitis.

## 6. DETERMINATION OF SURGICAL INDICATION FOR ACUTE APPENDICITIS USING SIMPLE MATHEMATICAL METHOD

J. Shiho, J. Ukishima, M. Takahashi, S. Suzuki, M. Yanase, Z. Honda,  
Y. Awane, O. Watanabe, K. Toyama and T. Okamoto  
*Surgical Dept. of Bokuto Municipal Hospital*

Since January 1966, we have been trying to know the histopathological diagnosis of the acute Appendicitis preoperatively using mathematical statistics. The purpose is to exclude the mild appendicitis out of surgery and to bring severe cases to the operative table exactly.

We find likelihood method suitable for these objects. Checking seven items of main signs and symptoms, that is the localization of the initial pain, presence of defecation, presence of nausea or vomiting, extent of tenderness, presence of muscle guarding and rebound tenderness, grade of fever and level of leucocytosis, we can easily get statistical inference.

Four hundred and twenty nine cases of acute appendicitis were seen to our clinic from January 1, 1966, to June 30, 1967. Using this statistical method, 38.5 percent of the cases underwent, appendectomy, saved the others from surgery. Showing sharp contrast, appendectomies were done on 96.8 percent of the 460 cases from January 1, 1964 to June 30, 1965, when this method was not used. So we could save two thirds of the cases from unnecessary appendectomy.

While 58 percent of the cases were catarrhal appendicitis in the early series the percentage reduced to 19 in this series. This fact means the success to exclude the mild cases. Besides, 100 percent of the severe cases, such as gangrenous type, were operated upon.

This method made good guess of average 92 percent.

The result is satisfactory for these purposes.

## 7. CONSIDERATION OF EMERGENCY OR ELECTIVE APPENDECTOMY FROM THE SURGICAL AND PATHOLOGICAL POINT

Takayoshi Tobe, M. D.  
*Japan Baptist Hospital Surgical Department*