Panel Discussion: Reevaluation of the Medical Treatment for Gastroduodenal Ulcer

Co-moderators: Haruya Okabe (Kitasato Univ.) and
Kiichi Muto (Niigata Univ.)

(1) Clinical reevaluation of the classical medical treatment for the peptic ulcer

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The efficacy of medical treatment for an acceleration of the ulcer healing should be evaluated by double blind controlled study, because the spontaneous healing tendency of the peptic ulcer itself is quite strong. Many contradictory results have been reported about the efficacy of current drug therapy. The symptoms of peptic ulcer patients are relieved quite rapidly with the classical drug therapy (antiacids, anticholinergics, antipeptic agents and others) within one or two weeks, when the ulcer is still active. It is unknown whether or not these drug therapy should be continued even after the disappearance of symptoms, and whether or not the healing speed of the peptic ulcer would be delayed after cessation of these drugs. So we tried a following clinical study.

Seventy-five outpatients with gastric ulcer and 54 with duodenal ulcer found during 5 months from July to November 1975 were treated with the classical drug therapy in the first two weeks, and then they received placebo therapy for the following 10 weeks. The symptoms of the all patients were relieved within the first 2 weeks. The results of this trial group was compared with those of control group, to which the classical medical treatment was continued for full 12 weeks.

The results: The rates of the symptom recurrence during the placebo period were below 30% both in gastric and duodenal ulcer. However, the rate of healed gastric ulcer was slightly higher in this trial group than in control (not significant). The both groups of patients were comparable with many factors, which were almost similar. The rates of heald duodenal ulcer were almost same in both groups. There was no relationship between the recurrence of symptoms and the gastric acid secreti on (BAO and MAO).

(2) Statistical analysis of recurrence in peptic ulcer with special reference to its prevention

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In 300 peptic ulcer cases detected in the mass screening treated thereafter for 3 to 9 years in the ulcer clinic of Miyagi-ken Taigan-kyokai, the recurrence was seen in 18% and the aggravation from the almost healed state was in 19.3%.

Questionnaires were collected from 1030 cases (gastric ulcer 940 cases, duodenal ulcer 90 cases) out of 1600 peptic ulcer cases detected in the mass screening during the periods of 1968.1969 and 1973.1974. The recurrence was seen in 21% of gastric ulcer cases, in 24.4% of duodenal ulcer cases. Higher rate of recurrence was seen in farmers, white-collar workers, public officials and teachers. However, there was no signifficant differences as to blood type, habit, diet, complication, complaints, medical therapy, admission to hospital or surgery etc. between the groups with and without recurrence.

The consumption of antiulcer drugs in 8 main hospitals in Tohoku district was found to differ markedly from hospital to hospital, suggesting that a definite principle for prevention of recurrence on peptic ulcer has not been established. In two hospitals, however, the yearly consumption of antiulcer drugs showed the increasing tendency of mucosal restoratives and antipepsin agents in comparison with anticholinergic agents and antiacids. The same tendency was seen in the pharmaceutical productions in Japan. These changes may reflect the beneficial effect of various antiulcer

agents proved by the double blind technique in the recent clinical investigation and the recent pathophysiological progress such as in the field of gastrointestinal hormones.

(3) Reexamination of therapeutical policy for gastric and duodenal ulcers—Reexamination of psychosomatic therapy

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Therapeutic approach from the view point of psychosomatic medicine plays a significant role in the treatments of gastric and duodenal ulcers which belong to the typical psychosomatic disorders. I could recognize this reference on the basis of the results obtained in the present study.

1) Mental and physical rest is of course necessary for the treatment of ulcer. For that purpose hospital care would be desirable. As a proof, when the average time required for the healing of ulcer (average healing time) was compared, it was found to be shorter in the former; in case of gastric ulcer it was 76 days in the out-patients, while 34 days in the in-patients, and in case of duodenal ulcer it was 63 days and 34 days, respectively. However, since each patient with ulcer has different conditions and circumstances, respectively, it would not be necessarily in the right to hospitalize all patients with ulcer. When hospitalization could bring about an isolation of patient from stressful environment, mental as well as physical rest and make patient feel fine, it would be effective. On the other hand, hospitalization itself could be stressful to patient, that is, it causes patient to feel uneasy about the family and the job, it would not yield any significant effect. To be important, in addition, it would greatly influence the effect of hospital treatment whether there is a good relationship based on reliance between the doctor in charge and the patient or not. In patients who harbor distrust in doctor and in addition, discontent with other medical stuffs than doctors and hospital itself, the effect of hospital treatment would be lessened.

2) As inducements of recurrence of ulcer, three were roughly taken up and examined; mental stress, physical fatigue and inappropriate dietary habits. As a result "mental stress holds the first place in every age group. Although recurrence is regarded as a fate of ulcer, the most important point to reduce it as far as possible lies in an appropriate psychosomatic approach according to each patient.

3) Equivocal complaints followed by gastric resection which have been occasionally come into discussion could be considerably influenced by the situations how reasonable an explanation the physician has made on the occasion of transfer of patient to the surgical clinic and how appropriate a psychosomatic approach the surgeon has tried before and after operation.

4) Some other practical problems on this matter will be pointed out and discussed on the basis of actual data.

(4) Review of surgical treatment for gastric and duodenal ulcer

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From 1963 to 1974, five hundred and thirty-eight patients with gastric or duodenal ulcer were treated surgically in our clinic. Subtotal gastrectomy (SG), selective gastric vagotomy with antrectomy (SGV + A) and selective proximal vagotomy with pyloroplasty (SPV + PP) were three principal operations employed in this period. Operative death was found in 7 patients, its mortality rate being 1.3 per cent. Forty-four patients died subsequent to discharge from hospital, all due to intercurrent conditions.

The long-term results more than one year were assessed by a questionnaire sent to patients received these operative procedures. The answers were collected from 392 out of 473 patients in total; 301 from SG group, 60 from SGV + A group and 31 from SPV + PP group. The so-called "post-gastrectomy" or "post-gastric operation" syndromes were studied by analysis of these answers. Regarding to these procedures, no significant differences were noted on the incidence of various symptoms

due to disturbance of alimentary function—for example, epigastric distress after meals, nausea, vomiting, diarrhea and dumping. The incidence of recurrent ulceration was 0.3 per cent in SG group and 3.2 per cent in SPV + PP group. No recurrence was found in SGV + A group. For the purpose of overall assessment of the patient's functional condition and social rehabilitation, we have used a modified Visick classification. The proportions of combined category I (excellent) and II (good) cases were 74.1 per cent in SG group, 73.7 per cent in SGV + A group and 70.9 per cent in SPV + PP group. No significant difference was also observed in this respect.

Unfortunately the numbers of cases in SGV + A and SPV + PP groups were relatively small and further studies should be performed on larger groups to make the reasonably accurate comparisons of clinical results in these different types of operation.

(5) Reevaluation of surgical treatment for gastroduodenal ulcer

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In our clinic, the distal two-third resection of the stomach (gastrectomy) has been performed as an operative procedure for gastroduodenal ulcer. Recently, however, other surgical procedures are widely performed to preserve the stomach as much as possible.

This paper is to present the comparative studies based on long follow-up of four operative procedures mainly performed during the period of January 1960 to December 1974; They are 769 cases of gastrectomy, 44 cases of antrectomy alone, 78 cases of selective vagotomy (S.V.) + antrectomy, and 21 cases of S.V. + pyloroplasty.

Results are as follows:

1. Operative mortality was 0.7% in elective operation and 2.9% in emergency operation.

2. To prevent recurrent ulcer, S.V. + antrectomy and S.V. + pyloroplasty are better for duodenal ulcer and gastrectomy is better for gastric ulcer respectively.

3. As for early rehabilitation within two months and return to normal diet, antrectomy, S.V. + antrectomy, and S.V. + pyloroplasty were superior to gastrectomy.

4. The incidense of small stomach symptoms in antrectomy and dumping syndrome in S.V. + antrectomy were lower than other operative procedures.

5. For the post operative exo-endocrine system of the stomach, S.V. + antrectomy was better than antrectomy and S.V. + pyloroplasty.

6. More than 90% have had a satisfactory results in each operation and there were some significant differences among four procedures.

(6) Review of surgical treatments for gastric and duodenal ulcers

Hisashi Matsuki

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Selective surgery has been employed on 954 patients with gastric and duodenal ulcers in our clinic since 1961. The most important factors for selection of operative procedures consist, among others, of the sites of ulceration and the levels of gastric acidity. The main five operative procedures employed at present in such a selective surgery are a proximal gastrectomy, segmental gastric resection, antrectomy with selective gastric vagotomy, selective proximal vagotomy with pyloroplasty and conventional two-thirds gastrectomy.

Operative mortality was 0.6% in elective surgery and 4.3% in emergent surgery. About 40% of patients receiving surgery on emergency for massive hemorrhage or perforated ulcer had a history of the internal treatment for peptic ulceration. Of 944 patients exclusive of those of operative death, only one treated with a segmental gastric resection with incomplete vagotomy had developed a recurrent ulcer that subsequently proved healing after a complete vagotomy on re-operation.

The minimization of the extent of gastric resection is at present widely carried out to promote an early and to decrease a post-operative disturbance: the vagotomy apparently contributes to it is compensating for unsatisfactory reduction in gastric acidity.

However, it seems that a selective proximal vagotomy with pyloroplasty for a duodenal ulcer with an extremely high gastric acidity might not always obtain a satisfactory effect on acid reduction.

It has been our emphasis that, as far as any of these various operative procedures selected on the basis of an adequate indication depending chiefly upon the sites of ulceration and levels of gastric acidity is completely accomplished, the result would be mostly satisfactory for a sufficient reduction in gastric acidity, and early recovery and a decrease of post-operative disturbances.

(7) Re-investigation of the treating plan for the peptic ulcer diseases

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For the first step of the peptic ulcer treatment, that is the removal of complaints from the patient, rest, diet control, and administration of medicine are available to accomplish within a short period in the most of cases. However, surgical intervention may be concerned according to the condition in some cases. For the second step, that is the stimulation to the histological repair of the mucosal defect, approximately 50% of cases can be healed within 8 weeks by only rest and diet without any special medication. On the other hand, cases which could not be cured for 4 years or more are not rare in our series. Therefore we must try hard to make healing rate close to 100% within 8 weeks and to make unhealed case close to nil as soon as possible. For the third step, that is the prevention of recurrence, no significant countermeasure is arranged yet. In our 481 cases with the gastric ulcer who could be followed-up for more than 1 year (maximally 13 years) 380 cases (79%) revealed the recurrent gastric ulcer. In addition, cases which recurrent gastric occurs on the different part from the original site of the first ulcer increase gradually according to the prolongation of the follow-up period. This supports that the ulcer is one of the systemic diseases, which Palmer has pointed out. The cause of ulcer is still obscure although it is going to elucidate gradually. After the cause becomes clear, new treatment should be considered in meeting to the new trend.

(8) A comment of the treatment of gastroduodenal ulcer

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1) On the indication of operative treatment: The problem that, when and what kind of patients with peptic ulcer disease should be receive surgical intervention, is one of the most important and difficult judgement during conservative treatment. A retrospective statistical data in our clinic reveals that the total number of patients who have undergone to surgical intervention were almost constant during last 5 years although duodenal ulcer patients were significantly increased in last 2 years compared with gastric ulcer patients. However the ratio of emergency operation and patients with complications such as hemorrhage and perforations etc. was not significantly changed. These facts suggest that there is certain limitations in medical treatment and necessity of prospective determinations in surgical indications before development of emergent complications. This would especially be indicated in increasing number of duodenal ulcer patients.

2) On evaluation of selected surgical procedures: Vagotomies in two or three varieties have been greatly concerned by surgeons. However, in postoperative evaluations, there are some blind points. First is that the definition and retrospective confirmative methods of operative procedures have not been quite well established. Theories of certain kinds of operative procedures such as selective proximal vagotomy are certainly acceptable, but the results of the procedure could sometimes be evaluated without determinations of exact performance of the procedures. A new method which is capable of distinguishing total gastric vagotomy and partial gastric vagotomy is suggested by our laboratory research group.