since Jan.-June 1962; 15 (43%) of 35 followed up since July-Dec. 1962; 10 (36%) of 28 followed up since Jan.-June, 1963; 14 (33%) of 42 followed up since July-Dec. 1963; 10 (27%) of 37 followed up since Jan.-June, 1964; 9 (24%) of 37 followed up since July-Dec. 1964; 10 (23%) of 44 followed up since Jan.-June 1965; 12 (27%) of 45 followed up since July-Dec. 1965; 11 (17%) of 64 followed up since Jan.-June, 1966; 11 (18%) of 61 followed up since July-Dec. 1966 and 0 (0%) of 43 followed up since Jan.-June, 1967 occured relapses up to Aug. 1967.

Rate of malignant changes after the healing of benign ulcers: As above mentioned, 472 cases of gastric ulcer have been followed up after their healing, but only 4 were relapsed and were diagnosed as malignant histologically at after their operations. Two of them were early gasric cancers and other two were also in relatively early atage of gastric cancers.

On the other hand, 26 out of 251 cases of gastric cancers, which were closely investigated by serial sections, were gastric cancers occured from previous ulcers in strict definition, and further 17 could be added in lose definition. In total 43 (17.1%) out of 251 gastric cancers were proved to be changed from benign ulcers.

And 26 (42.6%) out of 61 early gastric cancers were proved to be changed from gastric ulcers. It is difficult to explain on this difference of occurance-rates of malignant changes from the follow-up group of healing ulcers and rate in operated gastric cancer groups.

We think it is not so often to change to malignant from healed ulcer scars, but might be high in rate from unhealed ulcer margins. So, surgeons or pathologists give high percentages and internists give very low percentages. Because surgeons cannot see all of healed ulcers by medical treatments, but can see relapsed or unhealed ulcers come to operation.

12. ON THE INCURABLE, RELAPSING ULCER

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We studied incurable, relapsing ulcer with the object of finding out whether the surgical treatment was necessary or not.

Among 316 cases of gastric ulcer which we found in our clinic, 25 cases were incurable type which took longer than 4.4 months for healing.

The incurable ulcer were mostly found on lesser curvature and (or) rear wall of gastric body and (or) gastric angle.

Fourteen cases of relapsing ulcer showed the conspicuously prolonged period for healing compared with that of the first medical treatment.

The secondary attacks of the ulcer occured mostly within six months.

The size of ulcer was $0.5 \sim 3.0$ cm. in length and $0.4 \sim 1.1$ cm. in depth. Incurability had no relation with the size or depth in our cases.

The shape was mostly oval or of irregular margin.

Uprising callosity, concentrated relief and irregularity of margin were found surrounding the ulcer.

These distinctive features of ulcer discovered from internist's point of view were almost the same with surgically exercised 73 cases of gastric ulcer.

We reached the conclusion that surgical treatment should be taken into consideration when we, internists, treat incurable ulcer and (or) relapsing ulcer.