One of the unsolved problems is the early diagnosis of gastric cancer. Every method that may prove helpful should be tested. Recently the search for cancer cells in the gastric juice introduced by Papanicolau and his followers has been widely accepted. His method was verified by us in 315 patients with gastric and duodenal diseases. Method used at Prague: a sample of juice from fasting subjects was fixed in alcoholether, smeared and stained according to the method of May-Grünwald and Giemsa. Method used at Ústí n/L.: After obtaining the samples from fasting subjects the routine histamine test was performed. During this test the gastric juice was neutralised with 1.3% Na_3 C0_3. The samples were aspirated as usual. (This is a modified Tomenius method.) Further procedure was the same as noted above. No substantial differences in the evaluation of the smear could be found. The results were:

In 95 patients the gastric cancer was confirmed histologically or by means of laparotomy or by X-rays. In 40 patients (42.1%) the examination was positive, in 9 (9.5%) very suspicious, in 6 (6.3%) dubious, in 40 (42.1%) negative. In 220 patients without apparent gastric cancer the examination was positive in 17 (7.8%) cases, very suspicious in 12 (5.45%), dubious in 15 (6.75%) and negative in 176 (80%) cases. The false positive results were found in various gastric and duodenal diseases. Twice the cytologic examination disclosed the gastric cancer earlier than the X-rays. In the first case the X-rays showed only a gastric ulcer. In the second the X-rays were negative in spite of postresectional relapsing cancer. In the case of cirrhotic cancer it fails to disclose the malignant disease. The method may prove most useful in the case of slowly developing cancer (Gutmann) and in recurrences of cancer after gastric resection.