# A NEW APPROACH IN COMPLEX TREATMENT OF APPENDICULAR INFILTRATE

**Ibragimova M.U., Nishanov M.F.**
*Andijan State Medical Institute*

**Introduction**. The advantage of interval appendectomy is a reduced risk of complications and complexity of surgical intervention. The authors showed that the duration of surgery and the volume of blood loss in delayed operations were significantly less compared to emergency appendectomy (47 minutes versus 169 minutes and 5 ml versus 155 ml, respectively). In turn, with conservative treatment, approximately 21% of patients may develop complications, including those associated with wound infection after delayed surgery or recurrence of an abscess.

Aim. To improve treatment outcomes in patients with appendicular infiltrate.

Materials and methods. We present data on the distribution of body temperature in patients with AI in two groups. At baseline (initial data), in the comparison group, the temperature was <37°C in 12 patients (28.6%), 37-38°C in 21 patients (50.0%), and above 38°C in 9 patients (21.4%). In the main group, these values were: <37°C: 11 patients (27.5%), 37-38°C: 19 patients (47.5%), and above 38°C: 10 patients (25.0%). Statistical analysis ($\chi^2 = 0.147$) shows that the differences are not significant ($p = 0.929$). On day 3 in the comparison group, there were only 13 patients (31.0%) with a temperature <37°C, 23 patients (54.8%) with a temperature of 37-38°C, and 6 patients (14.3%) with a temperature above 38°C, while in the main group, a temperature value of <37°C was verified in 27 patients (67.5%), 37-38°C in 11 patients (27.5%), and above 38°C in only 2 patients (5.0%). Statistical analysis ($\chi^2 = 11.093$) shows significant differences between the groups ($p = 0.004$), indicating a faster decrease in temperature in the main group. On day 5, statistical analysis ($\chi^2 = 11.987$) also shows significant differences ($p = 0.003$), confirming the effectiveness of treatment in the main group. On day 7 in the comparison group, the temperature was <37°C in 33 patients (78.6%), 37-38°C in 7 patients (16.7%), and above 38°C in only 2 patients (4.8%). In the main group: <37°C: 37 patients (92.5%), 37-38°C: 3 patients (7.5%). Statistical analysis ($\chi^2 = 3.782$) shows that the differences are not significant ($p = 0.151$), which is also noted on day 10 ($\chi^2 = 2.672$) shows that the differences are not significant ($p = 0.103$). Accordingly, if initially the differences in temperature between the groups were insignificant, then on the 3rd and 5th days significant differences are observed, indicating a faster decrease in temperature in patients of the main group. By the 7th and 10th days, the temperature in most patients in both groups stabilized below 37°C, and the differences between the groups became less pronounced and statistically insignificant. This confirms that the main group achieved temperature normalization faster, indicating more effective treatment of AI in this group.

Initially, the average temperature in the comparison group was 37.6±0.6 °C, in the main group - 37.7±0.7 °C. In dynamics, on the 3rd day, the temperature in the comparison group decreased to 37.3±0.5 °C, while in the main group it was down to 37.0±0.5 °C (t-value was 3.13, indicating a significant difference - $p < 0.05$). On the 5th day of treatment, the temperature in the comparison group continued to decrease to 37.1±0.4°C, while in the main group a further decrease to 36.8±0.3°C was observed ($t=3.65$, $p<0.05$). On the 7th day, the temperature indicators in the groups also differed significantly and amounted to 36.9±0.4°C and 36.8±0.2°C ($t=2.75$, $p<0.05$). Only on the 10th day did the temperature in the comparison group stabilize at 36.8±0.3°C, in the main group the temperature was 36.7±0.1°C, however, even in this situation, the average values were reliably distinguishable ($t=2.80$, $p<0.05$). It should be noted that in the comparison group, against the background of treatment, the development of periappendicular abscess was noted in 10 cases, while on the 6th and 7th days, 2 patients in the comparison group were urgently operated on, in whom appendectomy was performed. Another 2 patients were operated with only opening and drainage of the abscess cavity. The remaining 6 cases were treated conservatively and (or) with puncture-drainage intervention under ultrasound control. In the main group, abscess formation occurred in 2 patients, and in 1 case percutaneous drainage was used, and in the other - only conservative management tactics. Accordingly, in the comparison group by the 7th day, 2 patients (operated with successful appendectomy) were excluded from the analysis by the size of the AI.

Next, the dynamics of the decrease in the area of the AI was analyzed. At the initial stage, the infiltrate sizes in both groups were comparable (56.3±33.9 $cm^2$ in the comparison group and 58.8±35.4 $cm^2$ in the main group), and the differences between them were not statistically significant ($p> 0.05$). However, already on the 3rd day, a significantly more pronounced decrease in the infiltrate area (up to 29±16.6 $cm^2$) was observed in the main group compared to the comparison group (43.4±25.5 $cm^2$), and these differences were statistically significant ($p< 0.05$). On the 5th, 7th and 10th days this trend was maintained: in the main group the infiltrate area decreased more intensively, reaching 18±9.9 $cm^2$ on the 5th day, 7.9±4.5 $cm^2$ on the 7th day and 4.6±1.1 $cm^2$ on the 10th day, while in the comparison group these values were significantly higher. By the 15th day in the main group the infiltrate was almost completely resorbed (4±1 $cm^2$), and only 3 patients remained in the group, while in the comparison group the infiltrate area was 5.8±3.2 $cm^2$, and the number of patients decreased less significantly, indicating a slower resorption of the infiltrate.

Distribution of patients with AI by the time of its resorption depending on the treatment used showed that up to 10 days in the main group, 20 out of 40 patients (50.0%) had resorption of the infiltrate, in the comparison group only 3 out of 42 patients (7.1%). On days 11-20 in the main group, another 19 patients (47.5%) showed complete resorption of the infiltrate, while in the comparison group a similar result was

observed only in 19 out of 42 patients (45.2%). More than 21 days were required in the main group only in 1 patient (2.5%), in the comparison group this category constituted a significant part - 18 patients (42.9%).

Conclusion. Thus, in the main group, where additional treatment methods (laser technologies) were used, a significantly larger number of patients had rapid resorption of the infiltrate, with half of the patients achieving this within the first 10 days. In the comparison group, resorption of the infiltrate was slower, and in 42.9% of patients the process took more than 21 days. Statistical analysis using the $\chi^2$ criterion (29.745; df=3; $p<0.001$) shows that the differences between the groups are statistically significant, indicating high treatment efficiency in the main group. These data emphasize the significant advantage of the methods used in the main group, providing faster and more effective resorption of the appendicular infiltrate.