

ORIGINAL RESEARCH

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Risk factors in the development of acute appendicitis complications

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Abstract

Background: To study the risk factors of the development of acute appendicitis (AA) complications in adults in order to improve the results of surgical treatment.

Material and methods: The research included 449 patients with AA treated surgically during the years 2015-2017 divided into 2 groups: 117 patients who were admitted with complicated appendicitis (intra- and extraabdominal complications) and 332 patients with non-complicated AA were randomly selected from the same period. The rate and characteristic of the complications evolved during the pre- and postoperative period in these two groups were specified and analyzed.

Results: In the acute complicated appendicitis group (CAA), there was a predominance of women with a ratio of 1.60 versus 1.26 in the uncomplicated acute appendicitis group (NAA). The proportion of people aged > 60 years was significantly higher in the case of CAA-23.1% (n=27), while in uncomplicated AA it was only 3.9% (n=13). In the case of AA complications, there was an emphasis on late addressing, the debut-addressing term being higher compared to uncomplicated AA. The low socio-economic status has a significant negative impact on the evolution of AA and its complications, as well as on the results of appendectomy. Thus, uninsured patients (n=59, 49.6%) formed almost half of CAA group. Associated comorbidities were established in 76 or 16.9% of cases, respectively in CAA-21.4% vs 15.4% in NAA group. In summary we note that the presence of associated uncorrected comorbidities has an obvious negative impact on the development of AA.

Conclusions: Our findings suggest that clinical assessment is most important for identifying individuals at risk of developing complications of AA and the above-mentioned risk factors are useful for emergency surgical decisions.

Key words: Complications of acute appendicitis, risk factors.