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E0055 Abdominal actinomycosis in Saint-Petersburg, Russia

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Background: The results of prospective 2005-2016 yy. single-center study of the abdominal actinomycosis patients.

Materials/methods: We included 162 patients with different clinical forms of actinomycosis. Age of patients was from 8 to 81 y, median - 42 (36,5÷52). The control group was made by 20 patients with abdominal nonspecific inflammatory processes.

Results: Abdominal actinomycosis was in 44% cases. Of these, isolated lesions of the abdominal cavity were observed in 11 patients (6%). Risk factor for abdominal actinomycosis was acute appendicitis with perforation (OR= 3.4[1.5-28.2]). Appendix (64%) and omentum (64%) were the most common sites of abdominal actinomycosis. Patients presented with non-specific symptoms such as fever (100%), abdominal pain (91%), and weight loss (36%). The formation of spontaneous draining of purulent material was in 27% cases. The time from onset to diagnosis varied from a few weeks to two years (median - 27 +/- 2 days). The diagnosis was based on histological examination of a postoperative material in all cases. The etiology agents were *A. israelii* (75 %) and *A. nuslundii* (25 %). CT was done before the start of treatment for 8 patients. A massive and dense infiltrates that extends beyond one organ, the involvement of fat in the process were determined by CT. Surgical resection of infected tissues was done in all patients: appendectomy (64%), sigmoid resection (45%), Hartmann operation (55%), extirpation of the large omentum (45%), resection of the large omentum (55%). All patients have been treated with high doses (12-24 million units a day) of intravenous benzylpenicillin over 2 to 4 weeks, followed by oral amoxicillin at a dose of 1,5-2 g/day for 6 to 12 months (median 9 +/-2 months). Efficiency of treatment was 92 %.

Conclusions: Abdominal actinomycosis makes 44% of cases from all clinical forms of a disease. Risk factor for abdominal actinomycosis was acute appendicitis with perforation (OR= 3.4[1.5-28.2]). The etiology agents were *A. israelii* (75 %) and *A. nuslundii* (25 %). Surgical resection of infected tissues and long-term antibiotic therapy was effective in the treatment of abdominal actinomycosis (94%).