

**DIFFERENTIATION OF REPETITIVE FORMS OF LIVER ECHINOCOCCUS USING THE PREINV INDEX**

**Raimov S.A.**

**National Medical Center, Tashkent, Republic of Uzbekistan**

**The relevance of the problem.** Recurrent forms of liver echinococcosis continue to be a relevant problem for endemic regions, despite the development of modern diagnostic methods and surgical treatment. Re-identification of parasitic cysts may be due to incomplete initial diagnosis, insufficient radicality of the intervention, intraoperative implantation of viable parasite elements, or re-infection of the patient. The use of the general term "recurrent" to describe these conditions makes it difficult to interpret them clinically and does not allow for precise determination of what needs to be corrected: surgical techniques, postoperative monitoring, or public health measures.

**The purpose of the study.** To carry out a clinical and organizational analysis of repeated forms of liver echinococcosis and to determine their significance as an indicator of the quality of primary diagnosis, surgical treatment, and preventive measures.

**Material and methods.** A retrospective multicenter analysis of 273 patients with recurrent liver echinococcosis treated in 2015-2025 in 16 different medical institutions was conducted. The authors analyzed the timing of detection of recurrent lesions, the location of the cysts, the relationship to the primary surgical site, the size of the recurrent cysts, ultrasound and computed tomography findings, intraoperative findings, and the level of the medical facility where the primary and recurrent treatments were performed. Special attention was paid to the relationship between recurrent forms of the disease and the quality of initial diagnosis, the completeness of surgical treatment, and adherence to the principles of a parasitism and postoperative monitoring.

**Results.** Most of the recurrent lesions were localized in the same liver lobe or in the anatomical proximity of the primary intervention site. This suggested that the majority of recurrent echinococcosis was not due to new infection, but rather to residual or implantation mechanisms. According to the integral assessment, potentially preventable forms of recurrent lesions accounted for about 84.6%, while probable true reinfection was detected in 15.4% of patients.

The obtained data change the clinical interpretation of recurrent liver echinococcosis. If the majority of recurrent cases are related to residual and implanted forms, then prevention should focus on improving the quality of initial diagnosis and surgery, including more accurate imaging, assessment of multiple lesions, intraoperative monitoring, adherence to aseptic principles, adequate treatment of residual cavities, and standardized follow-up. In an endemic region, the level of the institution where primary treatment is performed is particularly important, as differences in diagnostic and technical capabilities can increase the likelihood of a residual or implant mechanism.

True reinfection requires a different preventive approach based on sanitary and epidemiological measures, control of sources of infection, sanitary education, and dynamic monitoring of risk groups.

**Conclusion.** Recurrent liver echinococcosis is not only a clinical but also an organizational problem. The prevalence of residual and implanted forms indicates the need to standardize primary surgical tactics, improve the quality of diagnostics, implement the principles of surgical audit, and regulate postoperative monitoring. Differentiation of the mechanisms of repeated

lesions allows us to determine the main preventive focus: improving surgical care or strengthening sanitary and epidemiological control.

