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**COMPARATIVE PATHOMORPHOLOGY OF “NEGLECTED DISEASES”:  
ECHINOCOCCOSIS AND ALVEOLAR ECHINOCOCCOSIS IN BELARUS AND EUROPE**

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**Relevance.** According to the WHO, “neglected diseases” are a group of various conditions prevalent mainly in developing countries with tropical climates. They are caused by a range of pathogens, including viruses, bacteria, parasites, fungi, and toxins, leading to devastating health consequences and socioeconomic burdens. Cystic echinococcosis (CE) and alveolar echinococcosis (AE) are also classified as neglected diseases. Worldwide, approximately 10,500–18,000 cases of AE are registered annually, 92% of which occur in China. CE is more widespread, predominantly affecting younger patients, whereas the alveolar form is more common in middle-aged and elderly individuals. Nevertheless, cases of these “neglected diseases” continue to be reported in the Republic of Belarus and European countries.

**Aim:** to perform a comparative histopathological analysis of different types of echinococcosis in a patient sample from climatically and economically distinct countries.

**Results and discussion.** Biopsy records and prepared histological slides from 70 patients diagnosed with AE and CE at the Minsk City Pathological Anatomy Bureau between January 1, 2015, and January 1, 2026, were analyzed. Morphological and statistical methods were employed, and data were processed using Microsoft Excel.

**Results and their discussion.** Morphological analysis revealed that the key histopathological differences between AE and CE lie in the structure of the cyst walls, the pattern of parasitic cyst growth, and the host response. The study found that the mean age of patients in the Belarusian sample was 44 years (range: 15–83 years), with a female-to-male ratio of 51/73% to 19/38%. The parasite was most commonly localized in the liver (55/67%), with less frequent involvement of the lungs (19/23%), lymph nodes (3/4%), adrenal glands, ovaries, pancreas, spleen, and peritoneum (1/1% each). CE was found in 44/63% of cases, and AE in 26/37% of cases. For the European sample, published data on 162 patients (age range: 7–82 years) were used, showing a slight female predominance (97/60%). The liver was the most frequently affected organ (118/73%), followed by the lungs (23/14%), and other organs accounted for 21/13% of cases. CE was more common (110/68%; mean patient age: 34 years), while AE was less common (52/32%; mean patient age: 51 years).

**Conclusions.** This study identified the main pathomorphological and epidemiological differences between CE and AE in the Belarusian and European samples. The situation regarding neglected diseases caused by *Echinococcus* species in the Republic of Belarus appears worse in the following respects: the proportion of AE cases (26/37%), and the rate of extrahepatic involvement (23/33%) with predominant lung involvement (19/23%), which may indicate disease dissemination. However, the higher mean age of AE patients in the European sample (51 years) may reflect later diagnosis. Thus, “neglected tropical diseases” are neither entirely neglected nor exclusively tropical, as they continue to be found even in prosperous developing and developed countries with a temperate continental climate.