INTRODUCTION
In Ukraine, not a single clinical case of Edwardsiellosis has been described yet. Edwardsiellosis is a zoonotic infectious disease that caused by Edwardsiella tarda and characterized by gastroenteritis in humans [1-3]. It has also been implicated in meningitis, biliary tract infections, peritonitis, liver and intra-abdominal abscesses, wound infections and septicaemia [4-10]. It has been often isolated from catfish fillets in processing plants and can spread to man via the oral route or a penetrating wound [11]. Contaminated water can also be a source of infection.

CLINICAL CASE
A student from Ghana, 22 years old, on the 3rd day of illness was hospitalized to the infectious disease unit of the Municipal Institution “Chernivtsi Regional Clinical Hospital” in Chernivtsi. Diagnosis on admission: food bacterial poisoning of moderate severity. Complaints – cramping abdominal pain, nausea, fever, fluid feces up to 5 times per day, general weakness. He associated his malaise with eating the seafood soup, which he has cooked by himself from a package given by his brother from Ghana. An objective examination: body temperature 37.8 °C, pulse 92 beats per min, regular. AP 100/60 mm Hg. Tones of the heart are sound. Tongue is wet, furred. The abdomen is soft, rumbling, and painful along the intestine, mostly in the right iliac section. Stool is liquid without pathological admixture, badly smelling. He was consulted by a surgeon who had ruled out any acute surgical pathology.

The patient has undergone general-clinical and bacteriological examination of feces. In the general analysis of blood, the shift of the leucocyte formula to the left was detected by increasing the cell-nuclear neutrophils to 26%. Edwardsiella tarda is isolated in the bacteriological culture method from feces.

While in hospital, the patient received the following treatment: a Trisolum solution, Rheosorbilact, Rehidron, Nifuroxazide, Norfloxacin, Enterosgel, Spasmalgon.

In the hospital, the patient spent five bed-days, and discharged in satisfactory condition with clinical recovery. Edwardsiella tarda is a motile, facultatively anaerobic, Gram-negative rod that is categorized as a member of the family Enterobacteriaceae. The genus Edwardsiella was first recognized by Trabulsi et al in 1962, followed by a description of E. tarda in the mid-1960s. These organisms have successively been named the “Bartholomew group” by King and Adler, the “Asakusa group” by Sakazaki and “Edwardsiella” by Ewing et al.

The genus Edwardsiella comprises a genetically distinct taxon weakly related to other members of the Enterobacteriaceae. It consists of bacteria differing strongly in their biochemical and physiological features, natural habitats, and pathogenic properties. The most common species of the genus is E. tarda, which was already described in 1965. Although it has been recovered from a variety of environmental and animal sources, E. tarda is predominantly found in fresh water and fish. Humans are regarded to be occasional hosts but are prone to serious diseases due to this organism. Most frequently, E. tarda causes gastroenteritis presenting as acute watery diarrhea resembling that produced by other toxigenic enteropathogens, but dysentery-like courses also occur. Immunocompromised patients, older adults, and children are predominantly affected. Extraintestinal infections such as septicemia - with a mortality rate near 50% - and wound
infections have also been reported. Exceptionally, *E. tarda* has also been found to cause meningitis, peritonitis, osteomyelitis, and liver abscesses. In 1980, a second *Edwardsiella* species was proposed by Grimont et al. and was named *E. hoshinae*. In contrast to *E. tarda*, *E. hoshinae* is found in relatively few ecological niches (i.e., birds, reptiles, and water). Although *E. hoshinae* has been isolated from human feces, its role as a human or animal pathogen has not been established. The third *Edwardsiella* species was created in 1981 and was called *E. ictaluri*. *E. ictaluri* shows unusual properties: Apart from having a low optimal growth temperature, this organism has been predominantly isolated from channel catfish, in which it causes fatal systemic infections known as enteric septicemia. Human infections due to *E. ictaluri* are not known; however, virulence-associated properties such as serum resistance, indicating the potential to cause human disease, have been documented for all *Edwardsiella* species.

*E. tarda* is typically isolated from fresh or brackish water environments such as river mouths. It has also been isolated from the intestines of humans (after eating fresh water food sources such as catfish or eels) and from animals, including reptiles and freshwater fish.

Of the three recognized species, only *Edwardsiella tarda* has been demonstrated to be pathogenic for humans. Chief infections associated with this species include bacterial gastroenteritis, wound infections such as cellulitis or gas gangrene associated with trauma to mucosal surfaces, and systemic disease such as septicemia, meningitis, cholecystitis, and osteomyelitis. Risk factors that are associated with *E. tarda* infections include exposure to aquatic environments or exotic animals (e.g., reptiles or amphibia), preexisting liver disease, conditions leading to iron overload, and dietary habits (e.g., raw fish ingestion). Although studies indicate that this bacterium is susceptible to iron overload, this organism has unusual properties: Apart from having a low optimal growth temperature, it is strongly recommended to conduct a sufficient heat treatment when seafood consumed. Primary nutritional toxicity clinical signs may mask aquatic zoonosis caused by *Edwardsiella tarda*. Infectious border control should ensure that the import into Ukraine of such preservatives of food products, highly probably infected by this agent is not allowed.

**CONCLUSIONS**

This clinical case of rare zoonotic infectious disease one more time proved that there is no borders for infection as general pathogenic concept. Migration and globalization of infectious pathology is a new reality. Classical bacteriological investigation of patient with gastrointestinal disorder is necessary for the obtaining of pure culture and final confirmation of etiologic diagnosis. Attentive epidemic history taking is essential in the formation of hypothesis according to presumptive clinical diagnosis. For the purpose of general prevention of this disease, it is a strongly recommended to conduct a sufficient heat treatment when seafood consumed. Primary nutritional toxicity clinical signs may mask aquatic zoonosis caused by *Edwardsiella tarda*. Infectious border control should ensure that the import into Ukraine of such preservatives of food products, highly probably infected by this agent is not allowed.

**REFERENCES**


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