

Human infection with sparganosis in Poland – a case study

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Sparganosis is a zoonotic disease and the infection with the *Spiromerta* sp. tapeworm larvae occurs through ingestion. The larva enters the organism through drinking of water contaminated by copepods (infected by a type of procercoid) or through consumption of undercooked meat of a snake or frog, or through application of poultices made from snake skin or frog skin. There have been more than 1600 documented cases of sparganosis in humans, most often occurring in eastern and south-eastern Asia. Only a few cases of infection with this parasite have been documented in Europe, mainly among the immigrant population. The case described in this text is the first instance of sparganosis in a human in Poland.

A 60 year old woman from Hajnówka (north-eastern Poland) came to the outpatient surgical oncology in Hajnówka in march 2016 with a detectable subdermal tissue lump. During a physical examination the doctor confirmed the possibility of a lump in the right lumbar abdominal region. The patient stated that she was bitten by a tick in this spot in November 2015 while she was collecting undergrowth. The doctor ordered an ultrasound guided fine needle aspiration biopsy (BAC). The ultrasound showed an image of a centre of heterogeneous echogenicity varying from the surrounding fatty tissue. The material obtained from the BAC was watery, cloudy and light grey. The microscopic analysis of the smear showed the presence of inflamed tissue fragments, multinucleate giant cells and gelatinous shreds with circular, eosinophils. Due to the unique nature of the image and a lack of a definitive diagnosis the order was to remove the change and conduct a histopathological examination. The lumps were surgically removed with local anaesthesia. The patient was directed to the infectious disease unit for further treatment.

The case of the patient described here is the first documented case of sparganosis in a human in Poland. The infection took place most probably after consumption of untested game meat. What is important, the patient never left Poland to go abroad (the documented cases in Europe until now referred to immigrants from endemic regions).