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**Neuroimmunological findings from the first report of Angiostrongylus cantonensis outbreak in Ecuador**

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**Background:** Angiostrongylus cantonensis meningoencephalitis was recently reported in South America. The aim of this paper is to present a neuroimmunological study of the first report of two outbreaks in subtropical regions from Ecuador.

**Methods:** Eight young adults from two different outbreaks were studied. Simultaneous blood and cerebrospinal fluid simples were taken. IgA, IgM, IgG and albumin were quantified by radial immunodiffusion. Corresponding reibergrams were employed. The diagnosis of *A. cantonensis* meningoencephalitis was based on a previous antecedent of raw snail consumption, its symptoms and the cerebrospinal fluid characteristics.

**Results:** A moderate elevation of protein content in cerebrospinal fluid with 7, 7 and 26% of mean eosinophilia in serum and cerebrospinal fluid were respectively observed. Three immunoglobulins synthesis pattern was the most frequent one and IgM was presented in all the different patterns.

**Conclusion:** The reported patterns may be useful epidemiologically. The neuroimmunological findings contribute to improve and confirm the diagnosis of this disease now spreading over South America.

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**Pericarditis caused by spatype t011 MRSA in a butcher; an occupational hazard**

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**Background:** A 39 year old man from Turkish descent was admitted to our cardiology ward for evaluation of general malaise, fever and pericardial calcification with effusion. Diagnostic pericardiocentesis was performed and fluid was sent to the microbiology laboratory. Cultures revealed growth of methicillin resistant *Staphylococcus aureus* (MRSA) spatype t011, indicating veterinarian MRSA origin. Additionally *Mycobacterium tuberculosis* was cultured from the same material. Vancomycin treatment was started and the patient was transferred to the pulmonology department for further evaluation of his mycobacterial infection and for antituberculosis treatment.

**Methods:** MRSA of veterinarian origin is an emerging pathogen in the Netherlands causing a wide variety of infections. The majority of pigs and calves in our country is MRSA colonized; a quarter of the farmers is also MRSA positive. About eighty percent of meat from pigs and calves is MRSA colonized. Veterinarian MRSA strains almost all have spatype t011. Our patient was working in a large abattoir; his job was to carry large heaps of meat, resting on his chest, from one place to another.

**Results:** Our hypothesis is that our patient was MRSA colonized due to his profession. During pericardiocentesis the cardiologist perceived a suctioning sound. Tuberculous pericarditis causes pericardial calcification. During systolic contractions a vacuum will form in the pericardial space caused by non-compliance of the pericardium due to calcification. The vacuum causes inward airflow transporting airborne microorganisms to the pericardial space. Despite skin disinfection airflow during pericardiocentesis probably introduced MRSA from the patient chest. Nosocomial MRSA acquisition was ruled out; none of the healthcare workers involved was MRSA positive. Furthermore human to human spread of veterinarian MRSA is extremely rare.

**Conclusion:** We present a case of occupational MRSA acquisition which let to MRSA pericarditis by pericardiocentesis in a patient with preexisting tuberculous pericardial calcification.

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