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**Poster Session VI**

**Infection control - not only for MDR bacteria**

**NOSOCOMIAL CRIMEAN-CONGO HEMORRHAGIC FEVER OUTBREAK IN SOUTHERN KAZAKHSTAN**

**A. Dmitrovskiy**<sup>1</sup>, M. Shermetova<sup>2</sup>, R. Yegemberdiyeva<sup>1</sup>, L. Yeraliyeva<sup>3</sup>, K. Abdiyeva<sup>3</sup>, Z.H. Shapiyeva<sup>4</sup>, G. Utepbergenova<sup>5</sup>, A. Kuzmina<sup>6</sup>, E. Pak<sup>7</sup>

<sup>1</sup>Infectious diseases, Kazakh National Medical University, Almaty, Kazakhstan ; <sup>2</sup>Infectious diseases, International Kazakh-Turkic University, Turkhistan, Kazakhstan ; <sup>3</sup>Laboratory diagnostics, Kazakh National Medical University, Almaty, Kazakhstan ; <sup>4</sup>Parasitology, Scientific Practical Center for Sanitary-Epidemiological Expertise and Monitoring, Almaty, Kazakhstan ; <sup>5</sup>Infectious diseases, International Kazakh-Turkic University, Shymkent, Kazakhstan ; <sup>6</sup>Parasitology, Turkestan Sanitary-Epidemiological Department, Turkestan, Kazakhstan ; <sup>7</sup>Infectious diseases, Taraz city Infectious hospital, Taraz, Kazakhstan

**Objectives.** New endemic zones of Crimean-Congo Hemorrhagic fever (CCHF) appeared during last decade in Southern Kazakhstan Region (SKR). CCHF virus circulation was not detected in the territory of the Turkestan district (TD) prior to the early 2000s. There was 1 confirmed case in 2006 and 12 cases in 2009. 5 medical specialist were infected with CCHF in Turkhistan City Hospital (TCH). Objective of this work was to provide this outbreak study.

**Methods.** In 2006, we developed a standard case definition (SCD) for CCHF, and trained more than 100 infectious disease specialists (IDS) in SKR. But other specialists, such as surgeons or gynecologists, were not familiar with CCHF SCD, this was resulting in outbreak among medical personnel in Turkestan. We provided outbreak study, confirmed cases; provided anti-epidemic and introduce prophylactic measures (2009).

**Results.** We divided outbreak history in few phases.

Incubation and symptoms onset. A woman gave birth to a child in Turkestan city hospital and they both went home in three days. Two days later she returned to the hospital (with the child) because fever and metrorrhagia had appeared.

Misdiagnosis. There was determined only syndromic diagnosis (metrorrhagia), and provided surgical treatment on June 30, July 2 (uterectomy) and July 3, because bleeding didn't stop. The child became sick on July 1 (fever) and there was provided vein catheterization (July 2). The child died on July 3 and mother – on July 4.

Outbreak beginning. One participant of second surgery became ill on July 5. Neonatology specialist (catheterization – July 2) became ill on July 7. The IDS saw them on July 10 and suspected CCHF.

Suspicious – probable case. IDS found out that there was tick-bite in few days before childbirth.

Measures. We isolated sick doctors and check all medical workers and persons who had possibility of contact with blood died woman and her child, and with blood of sick doctors. We founded additional sick medical workers – gynecologist and anaesthetist (July 2 surgery), they became ill on July 10; and even – surgeon from another city (July 3 surgery), he became ill on July 5. The strong measures to preventing contact with patient blood or other liquids and permanent control for its using were introduced.

Performance. Five doctors were infected with CCHF by blood contact during this outbreak, three of them died. No more medical workers and patients relatives were infected during 2009 and following years.

**Conclusion.** The concept of SCD and risk assessment is new to Kazakhstan but it should be used in surveillance and medical practice and it can prevent transmission of pathogens to surrounding people and medical personnel. The SCD, risk assessment and safety techniques should be widely introduced into postgraduate training courses and medical practice.