Preliminary case report of fatal anthrax in an injecting drug user in North-Rhine-Westphalia, Germany, December 2009

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A fatal case of anthrax occurred in an injecting drug user in Germany, in December 2009. A potential link to similar cases in Scotland in the same time period is currently under investigation.

The Robert Koch Institute, in collaboration with the Friedrich Loeffler Institute in Jena, the Federal Research Institute for Animal Health, and the respective local and regional health authorities in the Aachen district, North-Rhine-Westphalia, Germany, are currently investigating a fatal case of anthrax in a 42 year-old male injecting drug user.

The individual was hospitalised on 6 December 2009, complaining of a swelling of his leg following drug injection into the popliteal fossa – reportedly attempting to inject into a vein. He probably injected heroin, however, details are unknown. Following treatment with meropenem and surgical debridement of a subsequent necrotising fasciitis, the patient died with multiorgan failure on 13 December 2009. Anthrax had not been suspected clinically.

Spore-forming bacteria from a wound swab specimen were identified, and on 18 December, the diagnosis of anthrax was confirmed by PCR. The last case of human anthrax in Germany had been reported in 1994, at that time affecting a 66 year-old man [1].

At this point in time, it is not clear whether there is a link between this case and the anthrax outbreak among injecting drug users in Scotland. As far as we know, the deceased had no travel history to Scotland. However, it can be assumed that other drug users in the same area in Germany, or perhaps elsewhere in the country, have been exposed. In case the hypothesis of a potential link to the Scottish cases proves true, it might well be that also other countries have been supplied with contaminated injectable drugs.

We launched an epidemiological investigation and exchanged information with the colleagues in the United Kingdom and, in particular, Scotland to coordinate the approach.

So far, the following measures have been taken:

- We have distributed information to public health colleagues, medical care facilities and low-threshold facilities in Germany to raise awareness of the event.
- We are collecting information on the case and his contacts, and on the substances consumed.
- We attempt further case finding.
- We aim at a microbiological comparison of isolates to establish a potential epidemiological link with the Scottish cases.

The success of the epidemiological investigation will rely on public health authorities' efforts, alertness amongst clinicians and medical microbiologists, but also on the degree to which drug users themselves can be reached. Therefore, it is of utmost importance to utilise existing communication channels to inform those who might be at risk.

References

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