Eurosurveillance

BICHAT CLINICAL GUIDELINES FOR BIOTERRORIST AGENTS

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The deliberate release of anthrax in the United States shortly after the terrorist attacks of 11 September 2001 brought about a radical change in people's perception of the risk of bioterrorism. These bioterrorist events, unlike others before, had a worldwide impact not only in respect of security and public health but also in other sectors. Governments and international entities with responsibilities related to maintenance of peace, security, safety and health protection reviewed urgently their political, economic, diplomatic, military and legal means to face up to such attacks and embarked upon major efforts to increase their preparedness.

In Europe, civil protection, security and law enforcement services were put on alert, and public health systems had to manage numerous events relating to letters suspected to be contaminated with anthrax. The disturbance and psychological effects of these incidents became of great concern to European societies and decision makers alike.

On 19 October 2001, the European Council, meeting in Ghent, asked the Council of Ministers and the European Commission to prepare a programme to improve the cooperation between Member States in the evaluation of risks, alerts and intervention, the storage of means of intervention, and in the field of research. The programme had to cover the detection and identification of infectious and toxic agents as well as the prevention and management of chemical and biological attacks. Shortly afterwards, the EU Council of Ministers requested the Commission to develop an action programme of cooperation on preparedness and response to biological and chemical agent threats. In response, the Commission launched a series of coordinated actions across the civil protection, health, enterprise, research, nuclear and transport and energy fields.

On the wider international level, Health Ministers from the G7 group of countries together with the Health Minister for Mexico and the member of the European Commission responsible for Health and Consumer Protection, agreed at a meeting in Ottawa on 7 November 2001 to initiate concerted global health security action to strengthen the public health response to the threat of international biological, chemical and radio-nuclear terrorism.

In the EU, many countries set up new administrative and operational structures and adapted their preparedness and response plans in order to deal with the new kind of threat. Recognising the importance of joint action and in order to complement national measures, the Health Ministers, together with the Commission, set up a Health Security Committee on 26 October 2001, to provide the coordination and consultation needed in the EU. Furthermore, the Ministers agreed to create a small task force with seconded national experts from academic medical centres and research, public health and emergency agencies in the EU countries, together with Commission officials, and charged it with the implementation of a 25-action programme on health security. Preparation and dissemination of European Union clinical guidelines on biological agents that may be used in terrorist attacks or threats was a key action under the programme.

Several guidelines have been published already. EU Member States have also issued guidance to health professionals under their jurisdiction. Most of these guidelines deal with the six agents considered as major bioterrorist threats, namely anthrax, smallpox, plague, tularaemia, botulism and viral haemorrhagic fevers. Moreover, these national guidelines do not focus on describing the clinical features of these agents;if included, the description tends to be limited. As a result, national guidelines are not the tool that clinicans need to be able to tackle the challenge of managing cases from bioterrorist attacks successfully.

Furthermore, more than one hundred and fifty pathogens have been reported to be potential agents for acts of bioterrorism. Many are uncommon in the EU and could easily be construed to be linked to an emerging infectious disease rather than point to, or be implicated in, a biological attack. It would be prudent to assume that many European Union clinicians are not familiar with the clinical features of these pathogens. Indeed, this feature of the clinical landscape became of great concern to Health Ministers and public health authorities.

It is against this background that action at EU level, as agreed by the Health Ministers, was undertaken. Its objective is to develop a set of documents that would be the basis for guidance by the national authorities or could be directly used by clinicians, general practitioners and specialists when confronted with patients infected by agents due to deliberate release of biological agents.

Of the numerous agents that may be used as biological weapons, a first set has been identified as deserving immediate attention in the context of this EU action. Ten clinical guidelines have been written so far, on anthrax, smallpox, botulism, tularaemia, plague, viral hemorrhagic fevers, viral encephalitis, Q fever, brucellosis, glanders and melioidosis [1-10]. Most of these agents have been studied, and some of them used as biological warfare agents. Historical data are available for most of them. All could be used in an aerosolised form which is the most effective route of transmission for a bioterrorist attack. Medline databases and pertinent articles in books and on the worldwide web were scanned for information published between 1962 to February 2003 on the agents selected.

In each of the papers that follow, after a short introduction, there is a summary of the epidemiology of the agent and its potential use in bioterrorism. In addition, recent data are included concerning the microbiological characteristics of the agent, the microbiological diagnosis and the treatment. The clinical features

of the disease, the main issue of these guidelines, are then described.

These clinical guidelines were reviewed by the Task Force and by two experts designated by each Member State of the European Union. This review was completed at the end of February 2003. The revised guidelines were submitted to the Health Security Committee which approved them in April 2003 and agreed their publication in a widely disseminated journal so as to allow access to as large an audience as possible. The editorial process of Eurosurveillance also introduced modifications that improved the contents of these guidelines.

It is hoped that the Bichat Clinical Guidelines that are presented here would become a useful tool in the hands of clinicians that might be confronted by a patient infected with a bioterrorist agent. To keep them up to date, regular revisions will be made based on new medical knowledge and developments in science and technology. Guidelines on other agents may also be produced in the future, if circumstances so require.

Euro Surveill 2004; 9 (12)
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