

GGII.4 cons is the consensus sequence of strains prevalent before 2002, GGII.4 2002 is the consensus sequence of the strain that was dominant in the 2002/2003 winter season, GGII.4 2004 is the consensus sequence of the strain that has become dominant during 2004. The sequence is from the RNA dependent RNA polymerase gene, the region upstream of the conserved YGDD motif. Eleven informative positions in the alignment have been highlighted with an asterisk above the sequence. In these positions one sequence is different from the other two.

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FIRST VANCOMYCIN-RESISTANT *ENTEROCOCCUS FAECIUM* OUTBREAK REPORTED IN HUNGARY

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The first healthcare-associated vancomycin-resistant *Enterococcus faecium* (VRE) outbreak in Hungary occurred between April and September 2004 at a haematology and stem cell transplantation unit of a hospital. Fourteen cases of infection and seven cases of intestinal colonisation were detected.

During the outbreak, *E. faecium* was identified in blood samples (9 patients), urine (12 patients) and wound secretions (two patients). The vancomycin-resistant isolates had vancomycin minimum inhibitory concentrations (MICs) of 48-128 µg/ml and were teicoplanin susceptible (MICs 1-2 µg/ml) (the so-called *vanB* phenotype). During the epidemiological investigation at the haematology unit in September, *E. faecium* isolates were also identified in three environmental samples (a surgical bowl, a sheet from a ward, and a wash basin from the bedpan-washing room). As part of the investigation, stool samples from forty patients were tested. Eight VRE positive samples were identified (colonisation in seven cases and one symptomatic case).

Two patients with symptomatic illness had undergone stem cell transplantation. Twelve of the 14 infected patients had malignant haematological disease. Five colonised patients also had haematologic malignancies, and one colonised patient had a benign form of disease.

Presence of the *vanB* gene in resistant *E. faecium* strains was confirmed by polymerase chain reaction testing. Twelve isolates analysed by pulse gel field electrophoresis (PFGE) showed similar patterns for resistant isolates that were different to the patterns seen with isolates of vancomycin-susceptible *E. faecium* strains found in the unit and with the set of *vanB E. faecium* isolates identified in the country.

Bacteriological surveillance data in Hungary show that, in 2003, vancomycin-resistant *Enterococcus* species isolates were less than 1% of all *Enterococcus* isolated in Hungary that year (15 933) [1]. The

monoclonal origin of the strains suggested that the emergence of the outbreak strain was recent and has not reached an endemic level.

During the outbreak, all patients were screened on admission. Patients were isolated until their screening results were negative. VRE-infected and/or colonised patients were isolated in separate rooms, and were nursed only by certain staff. The importance of hand hygiene and surface disinfection was emphasised. The outbreak ceased after the control measures were implemented. The last VRE-positive patient was identified on 2 September 2004.

This outbreak demonstrated the importance of strengthening infection control measures in the hospital, introduction of surveillance of multi-resistant pathogens, and revision of disinfection technologies and antimicrobial policy [2].

This is the first such outbreak reported in Hungary. The source was not identified cases were only identified by routine microbiological cultures. Three publications connected with the outbreak, on microbiological diagnosis of VRE [3], manifestations and therapy [4], and prevention and infection control [5]) have been Published on the website of the National Center for Epidemiology, in Hungarian only.

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CASES OF RABIES IN GERMANY FOLLOWING ORGAN TRANSPLANTATION

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On 16 February 2005, the Deutsche Stiftung Organtransplantation (German Foundation for Organ Transplantation, <http://www.dso.de/>) announced possible rabies cases in three of six patients who received organs from a donor who died in late December 2004 [1]. These three patients, who received lung, kidney and kidney/pancreas transplants following the donor's death, are in a critical condition. The remaining three organ recipients (two corneal, one liver) have not shown any signs of rabies.

The organ donor suffered cardiac arrest in a hospital, where she was resuscitated several times. Her circulatory system was stabilised, but prolonged hypoxemia led to brain death. There were no clinical indications that the donor patient was infected with rabies.

The Bernhard-Nocht-Institute for Tropical Medicine in Hamburg (<http://www.bni-hamburg.de/>) and the Konsiliarlabor for Rabies at the University Clinic in Essen's Institute of Virology confirmed the diagnosis of rabies in the donor and two of the recipients on 16 and 17 February, 2005 [2]. As a precaution, all contacts of the infected donor and the infected patients in Germany have received rabies immunoglobulin and started a course of rabies vaccination. A warning was posted on the European Early Warning and Response System on 18 February.

The risk of rabies infection in Germany is extremely low. The last two deaths due to rabies in Germany occurred in 1996 and 2004