

occurred for 19 years. From 1959 to 1983, numerous TBEV foci existed in northeastern Germany (3). From 1960 to 1985, a total of 4 human cases were seen 10 km east of Neustrelitz. From 1983 to 1989, numerous attempts to cultivate TBEV from ticks or small mammals failed (3). In 1992, TBEV genome was detected by PCR in 3 tick pools from the island of Usedom, and in 2 pools from the Darss peninsula, 100 km northeast of Neustrelitz. From 1993 to July 2004, TBEV genome was not detected in 16,098 ticks collected from 275 regions of northeastern Germany, including the county where Lake Woblitz is situated, as part of a statewide surveillance program (State Health Services, unpub. data). However, during 2004, this county reported 24 cases of Lyme disease (2003: 10 cases; 2002: 8 cases; 2001: 1 case). Therefore, our tickborne encephalitis case might represent intensified amplification cycles of tickborne infectious agents in 2004.

The absence of tickborne encephalitis cases for 20 years does not likely represent a lack of data before or a lack of interest after the reunification of Germany. Tickborne encephalitis was a reportable disease under East German regulations, and tickborne encephalitis surveillance was intensified after reunification (3).

Eight weeks after our patient's tick bite, 160 *Ixodes ricinus* ticks were collected from 10 pools near Lake Woblitz. RNA was isolated in 5 mol/L guanidium isothiocyanate solution, extracted by phenolchloroform, and precipitated with ethanol. cDNA was amplified by nested reverse transcription-PCR and detected by electrophoresis (6). In 2 of these pools, PCR directed towards the 5' terminal noncoding region of the TBEV genome yielded a 104-bp fragment, but the sequence was not specific for flaviviruses.

This case does not prove a northbound spread of tickborne encephalitis in northeastern Germany. Rather, it

shows that after years of negative tickborne encephalitis test results in ticks, old tickborne encephalitis foci may retain activity. Thus, tickborne encephalitis should be included in the differential diagnosis of meningoencephalitis in northeastern Germany, even if the patient has not been in tickborne encephalitis-endemic areas.

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Social Impact of Leishmaniasis, Afghanistan

To the Editor: For almost a decade, Kabul, Afghanistan, has had the highest incidence of cutaneous leishmaniasis in the world, with an estimated 67,500 to 200,000 cases each year (1-3). Because of sandfly vector exposure, most leishmaniasis lesions occur on the face; anecdotal reports of severe stigma are associated with the disease (3). To prioritize aspects of operational activities and before developing a disease-specific health education strategy, we collected data on knowledge, attitudes, and perceptions regarding leishmaniasis.

In October 2002, we randomly chose 5 of Kabul's 14 administrative districts to carry out a house-to-house survey (HHS) as well as 13 focus group discussions (FGDs) with women. The 5 districts chosen were Karti-Seh (HHS) and Dasht-e-Barchi (4 FGDs), Karti-Now (3 FGDs), Arzam Qemat (3 FGDs), and Rahman Mena (3 FGDs). The survey was conducted by using a standardized, multiple-choice questionnaire. The most senior, available family member in 252 neighboring households was interviewed, after the first household was randomly selected (2). We focused on women in FGDs because they have greater risk for leishmaniasis than men (2,3) and are often the primary caregivers in Afghan culture

(4). The same HHS questions were used in the FGDs. Surveyors randomly chose a house in each district and explained the study's purpose to residents. When residents agreed to host an FGD, women from neighboring households were invited to join. FGDs had a maximum of 12 participants and lasted 2 hours; answers to questions were recorded on paper. FGD moderators were instructed to pose questions, encourage free discussion, and ask participants to emphasize personal experiences. FGD data were analyzed by thematic analysis of the transcripts. Surveys were carried out by experienced surveyors, who have been involved in previous leishmaniasis prevalence surveys or intervention trials (2–4). Written approval for the study was obtained from the Afghan Ministry of Health, and oral consent was given by all surveyed persons. Active case-patients surveyed were offered free antileishmanial treatment at the HealthNet International leishmaniasis clinics.

A total of 252 and 108 persons were surveyed in the HHS and FGDs, respectively, although not all respondents answered every question. Our study confirmed the prevalence of cutaneous leishmaniasis in Kabul; 128 (51%) of 252 HHS respondents reported a family member with leishmaniasis. Respondents were knowledgeable about leishmaniasis: of 360 total HHS and FGD respondents, 287 (80%) said that it was a disease, and 160 (44%) said that it was acne. Of 66 FGD respondents who knew that leishmaniasis was a disease, 29 (44%) knew that it was transmitted by mosquitoes. Of 104 FGD respondents, 41 (43%) could describe the clinical symptoms of leishmaniasis (each was asked to give 1 answer only), i.e., an open wound ($n = 17$) that is not painful ($n = 7$) and takes a long time to cure ($n = 17$).

The principal finding of our study is that we show, for the first time, the extent of the disease's social impact in Kabul. Because erroneous beliefs

exist that the disease can be transmitted by person-to-person physical contact (of 360 respondents, the most common answers were "touching" [$n = 86$] and "sharing meals and household goods" [$n = 26$]), affected people are excluded from communal life. This exclusion can consist of minor domestic restrictions (40 [46%] of 89 FGD respondents said they would not share plates, cups, or towels with leishmaniasis patients) or more severe measures that lead to physical and emotional isolation. FGDs showed that leishmaniasis caused trauma; of 83 respondents who had children with leishmaniasis, 45 (54%) said their children felt disfigured because of lesions or scars ($n = 20$), because of painful treatment (intralesional or intramuscular injections with pentavalent antimony, $n = 19$), or because they were excluded from play with other children ($n = 6$). Of 96 FGD respondents, 21 (22%) said that a mother with leishmaniasis should not breast-feed her child; 48 (51%) of 94 FGD respondents would prevent someone with leishmaniasis from touching or hugging their children; 55 (57%) of 96 respondents said that a person with leishmaniasis should not be allowed to cook for the family; and 21 (22%) of 94 respondents said that a woman with a leishmaniasis lesion or scar will have difficulty finding a husband. Severity and visibility of the lesions as well as past experience of leishmaniasis within the family influenced respondents' answers.

The study yielded 2 other important findings. First, 245 (97%) of 252 HHS respondents knew that leishmaniasis does not resolve without treatment and that patients should seek professional assistance. Of 344 HHS and FGD respondents, 322 (94%) said that leishmaniasis patients should seek a doctor or clinic for treatment (as opposed to a traditional healer or self-medication). Second, 205 (57%) of 358 HHS and FGD respondents use methods to prevent exposure to sand-

fly vectors, i.e., screens for windows and doors ($n = 108$), nets around beds ($n = 63$), indoor insecticide spraying ($n = 24$), or other method of personal protection ($n = 10$); 152 (78%) of 252 HHS respondents said that they did not have a net over their bed because it was too expensive.

Kabul residents are knowledgeable about leishmaniasis; they are able to describe its symptoms and the necessity for professional treatment. However, we show that while many FGD respondents knew that leishmaniasis is transmitted by "mosquitoes," severe stigma and trauma are associated with the disease, particularly in children and women. Our operational experience corroborates this finding, which underlines the disease's social effect on the local population and refuting the belief that leishmaniasis is of little health importance (5). Half of the 15,983 leishmaniasis patients treated at HNI clinics in 2003 were women. Although women are at greater risk for leishmaniasis, they do not typically attend healthcare programs in Afghanistan because of sociocultural constraints (e.g., husbands not allowing their wife or daughters to attend) (6). In addition to diagnosing and treating active cases, HealthNet International will now focus on leishmaniasis education activities in Kabul, outlining aspects of disease transmission and prevention, as well as disseminating messages to reduce the disease's social impact.

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Methicillin-resistant *Staphylococcus aureus* Toxic Shock Syndrome

To the Editor: Toxic shock syndrome (TSS), which can be life threatening, is defined by clinical and laboratory evidence of fever, rash, desquamation, hypotension, and multiple organ failure caused by *Staphylococcus aureus* toxins. TSS caused by methicillin-resistant *S. aureus*

(MRSA) strains has been found extensively in Japan (1), rarely in the United States (2), and, thus far, not in Europe.

We report a case of TSS due to an MRSA strain that produced a TSS toxin 1 (TSST-1). A 54-year-old woman was admitted to the emergency ward of Brugmann University Hospital, Brussels, with a 2-day history of myalgia, diarrhea, and vomiting. She had undergone surgery for a palate neoplasia 2 months earlier, and again 2 weeks earlier, in another hospital. After the second operation, she had been treated for a local scar infection with amoxicillin–clavulanic acid for 1 week.

On physical examination, the patient was conscious, tachypneic, pale, and sweating. Her temperature was 38.2°C and her blood pressure was 70/50 mm Hg. Abdominal examination findings were normal. The cutaneous operative wound was red and swollen. Laboratory results included the following: leukocyte count 19,830/mm³ with 97% polynuclear neutrophils, platelets 90,000/mm³, creatinine 2.1 mg/dL, bicarbonate 13 mEq/L, cyclic AMP receptor protein 43.7 ng/mL, creatine kinase 514 U/L. Cultures of blood, stool, and urine samples were negative for microbial agents. Puncture of the wound released 12 mL of pus; culture of the pus sample yielded an MRSA strain harboring a TSST-1 gene, detected by multiplex polymerase chain reaction as previously described (3).

By molecular typing, the strain belonged to the epidemic MRSA pulsed-field gel electrophoresis clone G10 and carried the staphylococcal chromosome cassette *mec* (SCC*mec*) type II. This clone belongs to the sequence type (ST) 5-SCC*mec* II clone, formerly named “New-York/Japan clone,” which has been associated with neonatal TSS-like exanthematous disease in Japanese hospitals (4–6). This epidemic clone, which is widely disseminated in the

United States, Japan, and Europe, has been found in 12% of Belgian hospitals during a national survey conducted in 2001 (6).

The treatment included aggressive intravenous fluid resuscitation, administration of dopamine, and antimicrobial agent therapy with teicoplanin and clindamycin. The treatment outcome was favorable. On the second day, a diffuse cutaneous macular rash appeared. The acute renal failure and the biological abnormalities resolved. On the fifth day, the patient was transferred back to the hospital where she had undergone surgery; extensive peeling then developed on both of the patient’s hands.

Our patient met the criteria of TSS: she had fever, rash, desquamation, hypotension, vomiting, diarrhea, myalgias, elevated creatine kinase, acute renal failure, and thrombocytopenia. The diagnosis of staphylococcal TSS was confirmed by bacteriological results.

Although TSST-1 production by MRSA strains has been described in Europe (7), this case is the first of TSS due to TSST-1–producing MRSA in Europe. Recently Nathalie van der Mee-Marquet et al. (8) described the first case of neonatal TSS-like exanthematous disease due to a MRSA strain containing the TSST-1 gene in Europe. They emphasized the risk of emergence of neonatal toxic shock syndrome-like exanthematous disease outside Japan.

We would also like to emphasize the rising risk of TSS due to virulent MRSA strains outside Japan and particularly in Europe. The usual recommendations for the treatment of staphylococcal TSS do not consider this possibility and consist of a β -lactamase-resistant anti-staphylococcal agent and clindamycin in some cases (to decrease the synthesis of TSST-1) (9–11).

We immediately treated our patient with teicoplanin and clindamycin because we suspected a nosocomial