Results | Twenty-three of 200 (11.5%) LST larvae attached to 8 of the 10 participants during the 15-minute period. Tick attachment could easily be verified by observing the splayed palps and inserted hypostome (Figure 1B). On 1 research participant, there was immediate lesion development—two 1- to 2-mm erythematous macules (**Figure 2**A)—while 5 other participants developed erythematous pruritic papules within 48 hours (Figure 2B). In the participant who developed immediate lesions, these 2 macules became papulovesicular within 48 hours (Figure 2C), as did 3 other lesions on the same person on the other arm (Figure 2D).

Discussion | We show here that tissue damage from insertion of LST mouthparts and degranulating mast cells may be evident in as little as 15 minutes and may manifest as macules, papules, or vesicles. A previous study[6] showed that *A americanum* was the predominant species found attached to humans in Mississippi during a 10-year time span, and 10 of 36 (27.8%) LST larvae found on humans were either partially or completely engorged. That study, as well as these new data, indicate that the LST is an aggressive human-biting tick species that may readily produce cutaneous lesions in humans.

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The Accuracy of Diagnosis of an Online Consultation Service Compared With Physical Consultation With a Dermatologist

The division of Clinical Telemedicine at University Hospital Zürich in Switzerland has run an email-based online consultation service for laymen since 1999, offering a physical consultation when deemed appropriate.[1] We compared the adequacy of online diagnosis with the benchmark of an in-person dermatological consultation.

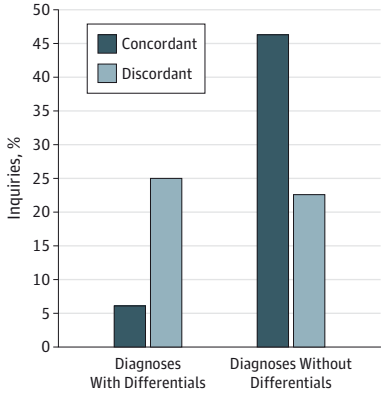
Methods | A retrospective review was performed for inquiries from June 2007 through September 2013. Paired online and physical consultations with a dermatologist after referral were included after institutional review board approval (NCT01969422). The institutional review board requested that patients be informed about a right to veto, which none exercised. Diagnoses were classified according to the dermatological diagnostic index developed by the German Dermatological Society DDG expanding the classifications of the *International Statistical Classification of Diseases and Related Health Problems, Tenth Revision*.[2] Concordance was defined as a matching of digits of the index code, resulting in 6 groups. IBM SPSS 22 software was used for descriptive statistics, χ^2, and Kendall τ. $P < .05$ was considered significant.

Results | One hundred two submissions (32 with photographs) were referred for dermatological consultation. A total of 88 patients presented, and 82 patients (median [SD] age, 38 [17] years, 41 [50%] male) were included. Diagnostic concordance was evenly distributed from low to high (χ^2 $P = .16$). A lack of differentials online (χ^2 $P = .001$), as well as on physical consultation (χ^2 $P < .001$), was associated with diagnostic concordance (**Figure 1**), but neither photograph submission, prediagnosed conditions, nor personal or family history information was significant (Kendall τ $P = .80$, $P = .04$, $P = .30$, $P = .16$, respectively). The kind of physician contact was associated with diagnostic concordance (χ^2 $P = .02$) (**Figure 2**). In 37 cases (42%), a second diagnosis was made at physical consultation.

The online and physical consultation diagnoses were concordant in 52% (n = 43, missing data n = 6) and enlarged concordant in 66% (n = 54, missing data n = 6). The patients' dermatological problems were complex (53 [60%] had already visited a physician). Other studies show concordance or enlarged concordance rates from 47% to 89%, while a concordance rate greater than 60% is deemed reliable in teledermatology.[3-6]

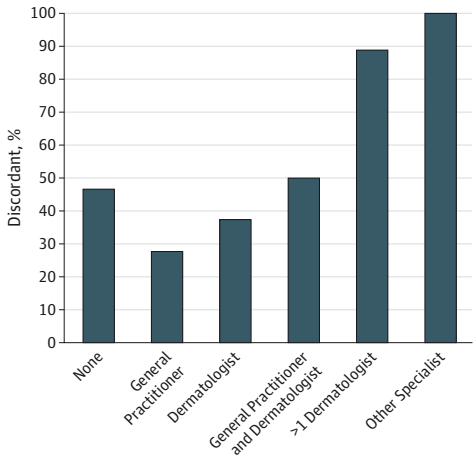
Discussion | Previous physician contact was not associated with diagnostic concordance except in cases in which more than 1 dermatologist or another specialist was visited. None of the information provided by users was associated with diagnostic concordance. Other studies did not look at this association of information provided and diagnostic concordance, but reported that a thorough history as such increases diagnostic concordance for clinical photographs from 57% to 70%.[4-6] We noted

Figure 1. Differential Diagnoses and Concordance



The mention of differential diagnosis is inversely associated with diagnostic concordance. The graph shows the distribution of all cases with concordant and discordant diagnosis divided into those with and without mention of differential diagnosis. Data are plotted for both online and physical consultations together for clarity's sake, with both kinds of consultations showing a clear association (online differentials, χ^2 P = .001; consultation differentials, χ^2 P < .001).

Figure 2. Type of Physician Contact and Diagnostic Concordance



The type of previous physician contact is associated with discordance of diagnosis between online and physical consultation. Previous physician contacts were categorized as no physician contact, contact with a general practitioner only, a dermatologist only, both a general practitioner and a dermatologist, more than 1 dermatologist, and with another specialist. Data are shown for 80 patients; data were missing for 8 patients (χ^2 P = .02).

absence of differential diagnosis as a factor in diagnostic confidence in both online (χ^2 P = .001) and physical consultation (P < .001).[4,5] In 37 cases (42%), a second diagnosis was made during the physical consultation, with 1 basal cell and 1 squamous epithelial carcinoma diagnosed at consultation. The limitations of our study include its retrospective design, lack of randomization, and the limited patient numbers.

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Influence of Fcγ Receptor Polymorphisms on Response to Anti–Tumor Necrosis Factor Treatment in Psoriasis

Biological agents have greatly improved the prognosis of psoriasis. However, these treatments are expensive, and 20% to 50% of patients do not achieve an adequate clinical response.[1] Therefore, identifying the biomarkers that predict the response could lead to individualized, more effective treatments.[1]

The anti–tumor necrosis factor (TNF) agents are the group of biological drugs most frequently used to treat psoriasis. Their Fc portion binds specifically to cell-surface Fcγ receptors (FCGR). These receptors may influence the immune response and half-life of the drug.[2] Single-nucleotide polymorphisms (SNPs) at genes encoding these receptors are related to differences in their affinity and effector properties.[2] The SNP *FCGR2A* (ENSG00000143226) rs1801274 A/G (amino acid 131 His or Arg) and *FCGR3A* (ENSG00000203747) rs396991 T/G (Phe or Val at position 158) might confer a higher affinity for IgG binding.