

Cellulitis and lymphangitis following an injury from a broken cellular phone touch screen

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TO THE EDITOR,

Cellular phones have become the most treasured and trusted companions of 21st century humans. We treated an otherwise healthy 17-year-old female for cellulitis and lymphangitis of the right hand and forearm that started following a laceration to her thumb incurred from the broken touch screen of her cellular phone. Her stubbornness to keep using the phone with a broken screen resulted in her hospitalization for a weekend of intravenous antibiotic treatment. After that weekend, her

condition resolved with no need for surgical intervention.

Cellular phones harbor a myriad of pathogens, primarily Staphylococci and Enterococci [1]. It has been shown that cellular phones used by patients harbor more pathogens than those used by healthcare personnel [2]. The proximity and intimate relations we develop with our cellular devices make them a potential hazard. Although the shift from key-based phones to touch screen phones may have alleviated phenomena such as the Blackberry thumb (if it ever existed) [3], touch screen use may be hazardous in its own right. The number of pathogens on cellular phones may be lowered with the use of alcohol wipes [4]. In these turbulent times of the coronavirus epidemic, medical personnel should put a greater emphasis on cellular phone hygiene [5] and make sure the cellular phone touch screen is intact.

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Capsule

Modeling SARS-CoV-2 in mice

High on the list of the research tools necessary to develop medical interventions to treat severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) infections are informative animal models with which to study viral pathogenesis. Gu et al. developed a mouse model in which a SARS-CoV-2 strain was infectious and could cause an inflammatory response and moderate pneumonia. Adaptation

of this viral strain in the mouse appeared to be dependent on a critical amino acid change, Asn⁵⁰¹ to Tyr (N501Y), within the receptor-binding domain of the viral spike protein. The new mouse model was used to study neutralizing antibodies and a vaccine candidate against the virus.

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Capsule

Lovastatin for cardiomyopathy

Mutations in the gene *LMNA*, which encodes nuclear envelope proteins, can cause dilated cardiomyopathy associated with arrhythmia and sudden cardiac death. To understand the mechanisms contributing to this disease, Sayed and colleagues studied induced pluripotent stem cell-derived endothelial cells (iPSC-ECs) from a family harboring an *LMNA* mutation. They found down-regulation of a protein involved in mechanotransduction,

which caused endothelial dysfunction. Lovastatin could induce this protein in iPSC-ECs, improving cardiomyocyte function in coculture and clinical endothelial cell function in two patients treated with the drug. This study demonstrates a workflow for identifying and validating potential drug treatments for patients with cardiomyopathy.

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