

Doctor Google, Mister PubMed?

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To the Editor,

To support diagnostic decisions, a search of PubMed is usually considered to be the best source. Our recent experience with a single patient suggests that an alternative search strategy can be even more effective at times.

A young healthy woman who lives in a southern village noted an itch in her index finger around midnight and saw a pinpoint black mark on her skin. Soon it became swollen and within 5 hours intense pain in her finger developed associated with local discoloration, malaise and fever of 38.6°C. She was admitted with normal vital signs and white blood cell count of $11 \times 10^3/\mu\text{l}$. Despite adequate intravenous antibiotic treatment, the pain in her finger required morphine and the finger became necrotic around the middle phalanx. Fasciotomy along the lateral aspects of the digit was performed, subcutaneous low-molecular-weight heparin administered and hyperbaric oxygen therapy in a hyperbaric chamber were commenced to try and save the finger.

In the absence of a viable alternative explanation the possibility of a spider bite was raised but its association with digital gangrene remained doubtful.

A PubMed search took a few minutes and yielded nil results in any combination tried (digital/finger gangrene/necrosis AND spider/loxosceles – altogether eight combinations using filters of English, humans and abstracts available).

The impression was that spider bites have not been previously reported as a possible cause of the patient's lesion.

However, the attending physician, unaware of the negative PubMed search, conducted a similar simple Google search. The single search took a second and yielded 54,900 results (finger loxosceles). Among the first ten hits, one article provided clinical pictures virtually identical to our patient's condition.¹ Another added a vivid description of the vasoconstrictive action of the loxosceles (brown recluse spider) venom and an exhaustive list of differential

diagnosis.² Both articles were fully available. The same information could be rapidly retrieved from the first ten hits of similar Google searches (e.g. finger necrosis spider). Thus, not even resorting to Google Scholar, physicians' Google-based search for diagnostic information may at times be more rapid and efficient than initiating a PubMed query. This appealing alternative option³ should be kept in mind.

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