Conflicts of interest

The authors have no conflicts of interest to disclose. The patient has granted consent for the publication of his/her pictures.

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Letter to the Editor

"Consistency an issue?" – A review of UK burns service online information on burns first aid

Dear Sirs,

Burn injuries can have a major impact on an individual or family's quality of life. The physical, emotional and potential financial burden can be overwhelming no matter how insignificant the burn may initially seem to be [1].

Appropriate and timely first aid has been widely documented to reduce the burden significantly. Unfortunately, there is inadequate knowledge [2] and poor use of correct first aid by the general public [3]. For this reason, Medical staff are frequently treating burn injury patients who have had little to no first aid.

With the majority of the UK having access to the internet [4], burns first aid injury advice should be simple and straightforward to find.

Many of the Burns Units and Centres in the UK have allied websites with online advice available for their patients. Furthermore, some have advice on Burns referral guidance for our colleagues.

Consistency in online burns first aid information is vital in avoiding confusion by members of the public. Previous studies have shown inconsistencies in first aid information between websites searched through popular search engines [5,6].

The British Burn Association (BBA) website provides sufficient information surrounding first aid [7]. However, patients may look to locally run websites for first aid treatment. For this reason, a review was performed of all the websites associated with our UK burns services, specifically looking at the First Aid Information with the aim to assess the consistency between them.

In April 2017, all burns services listed on the BBA website were identified and those that had specific Burns first aid information were compared against a list of Pre-Defined domains. These pre-defined domains were sourced from the British Burn Association First Aid Position Statement compiled in 2014 (Table 1). Additional domains were added from the

Table 1 – Burn first aid domains.

British burn association position statement domains	Additional domains from other sources
Stop burning process	Avoid topical products
Cooling period: 20 min	Electrical burn advice
Cooling method: Irrigate	Chemical burn advice
Time frame: <3 h	
Keep patient warm	
Remove clothing/jewellery	
Keep unremovable clothes intact	
Dressing advice	
Avoid tight dressings	

Table 2 – Number of websites displaying information as per position Statement.

BBA position statement: Domains	Number of websites giving such information (Percentage)
Stop burning process	7 (92%)
Cooling period: 20 min	7 (92%)
Cooling method: Irrigate	8 (100%)
Time frame: <3 h	3 (28%)
Keep patient warm	7 (92%)
Remove clothing/ jewellery	8 (100%)
Keep unremovable clothes intact	6 (75%)
Dressing advice– clingfilm/clean cloth	8 (100%)
Avoid tight dressing	6 (75%)

Table 3 – Additional domains from other sources.

Domains from other Sources	Number of websites giving such information (Percentage)
Avoid topical products	4 (50%)
Electrical burn advice	1 (13%)
chemical burn advice	1 (13%)

guidance of other well-known associations including the Australia & New Zealand Burn Association, Wounds International and the American Burn Association.

Of the 43 listed burns services in the United Kingdom (with duplication for adult and paediatric services) only 24 (56%) had affiliated websites. Only Eight (33%) of these websites had any guidance on Burn First Aid.

Table 2 presents how many of the domains were stipulated in each of the websites. Two websites had a direct link to the BBA position statement and hence presented each of the domains. These were the only two websites to do so.

Table 3 displays additional domains given by the Australia & New Zealand Burn Association, Wounds International and the American Burn Association.

The internet is a popular source of Health Information. With a reported one in five patients self-diagnosing using the internet instead of visiting a doctor in the UK [8]. Regrettably, not all the material available is robust, accurate and appropriate.

The evidence on which the BBA base their Burn Injury first aid position statement is robust. By following the advice they give, the overall morbidity of a burns injury can be somewhat reduced.

This small review was produced to assess the appropriateness of burn services online information compared to set domains. It is clear that discrepancies and inconsistencies are present between different units' websites.

With only 54% of units having an associated website, a rather low 33% of these give advice on Burn First Aid.

Dressing advice, the removal of clothing/jewellery and the cooling method were all very well described. However other domains were inconsistently discussed with the Timeframe being the least so.

Interestingly one website even gave advice of between "10–30 min" cooling period despite the position statement explicitly stating 20 min. It is unclear as to where the evidence for this has come from.

Though not part of the position statement the domains found in Table 2 were paradoxically discussed between websites, further highlighting the inconsistencies that patients may find between different Units Websites.

The British Burn Association has recently updated its First aid position Statements as of April 2018. It now includes advice on Chemical, Electrical, Tar & Bitumen and Frostbite Burns. This is a welcome update in a time where more patients and referring units are accessing the internet for medical information.

We encourage that all units with websites include a section concentrating purely on first aid. Additionally, we advocate that local unit websites update their guidance to reflect the BBA position statement, to reduce online information inconsistencies and discrepancies on Burn First Aid Treatment.

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Letter to the Editor

What do we lean from the "PhagoBurn" project

Dear Professor Steven E. Wolf,

PhagoBurn was the first randomised controlled trial to investigate phage therapy which was initiate in 2010. This study aimed to evaluate the efficacy and tolerability of PP1131 (cocktail of 12 natural lytic phages) compared with 1% sulfadiazine silver emulsion cream in patients with infected burn wounds.

The results were published on Lancet Infect Dis with the title "Efficacy and tolerability of a cocktail of bacteriophages to treat burn wounds infected by *Pseudomonas aeruginosa* (PhagoBurn): a randomised, controlled, double-blind phase 1/2 trial [1]".

A total of 25 subjects (PP1131 n=12, standard of care n=13, TBSA from 12% to 39%) were involved in this study. The authors found that the primary endpoint was reached in 144 h in the phage therapy group versus 47 h in the standard of care group (hazard ratio 0.29, 95% CI 0.10–0.79; p=0.018). In the PP1131 group, three of 13 participants had adverse events versus seven of 13 in the standard of care group. PP1131 decreased bacterial burden in burn wounds at a slower pace at very low concentrations. And the reason might be the huge reduction of phage concentration, which resulted in 1000-fold–10 000-fold lower dose of active phages administration. Furthermore, six cases with multidrugresistant bacteria infections have been successfully treated with phage therapy.

Infections were the main death causes for burn patients. Due to the increasing of antibiotic-resistance, phage therapy provide an alternative treatment for the resistant pathogens. In fact, two other phage therapy clinical trails had reported previously [2,3]. However, there are some obstacles to overcome including the stability of phages, the narrow host-range of phages and the long term effect after systematic use.

Conflict of interest

The authors had now conflict of interest.

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