Treatment of jellyfish stings in UK coastal waters: vinegar or sodium bicarbonate?

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A short cut review was carried out to establish whether there was any evidence in favour of either vinegar or sodium bicarbonate in the treatment of jellyfish stings in UK coastal waters. From a search of 325 papers, none addressed the clinical question. The clinical bottom line is that there is a lack of evidence on this question.

Three-part question

In [patients who have sustained a jellyfish sting from UK coastal waters], is [treatment with 5% acetic acid or sodium bicarbonate], [more effective]?

Clinical scenario

A 6-year-old child in bathing trunks and towel attends the emergency department, howling, with anxious parents in attendance. He has just been swimming in the sea and has large weals on his arm and leg from a common jelly fish sting which are very sore. You wonder what is the most effective way to treat this pain.

Search strategy

Medline 1950 to June 2007. OVID interface: [exp decontamination/OR exp Sodium Bicarbonate/OR exp bicarbonates OR exp Acetic Acid/OR vinegar.mp. OR antivenin.mp. OR exp Antivenins/OR baking soda.mp.] AND [exp "Bites and Stings"/OR sting.mp OR exp Cnidarian Venoms/OR exp Cnidaria/OR jellyfish.mp. OR exp Venoms/OR venom\$.mp. OR chrysaora hyoscella.mp. OR compass jellyfish.mp. OR non stinging barrell.mp. OR root mouth.mp. OR rhizostoma octop\$.mp. OR lions mane.mp. OR cyanea capillatum.mp.] AND [exp Treatment Outcome/OR exp Prognosis/OR outcome.mp. OR exp Outcome Assessment (HEALTH CARE)/]. LIMIT to English.

Search outcome

A total of 325 articles were found, none of which were relevant.

Relevant papers

No relevant papers given.

Comments

No studies were found comparing the two treatments. Most studies have been done in Australia on Box jellyfish stings, for which vinegar is used to prevent stinging cells adherent to the skin from discharging.

► CLINICAL BOTTOM LINE

Vinegar has been shown to work in the treatment of Australian jellyfish stings, but there are no data on bicarbonate use.