Table 1

Author, date and country	Patient group	Study type (level of evidence)	Outcomes	Key results	Study weaknesses
Quinn J, 2002, USA	91 patients with 95 lacerations enrolled. Criteria for inclusion: full thickness hand laceration, <2cm, uncomplicated (ie no tendon, vascular, joint, nail bed, nerve involvement or fractures), presentation within 8 hours of injury, haemostasis achieved within 15 minutes of presentation and no complications from diabetes, anticoagulants or steroids.	RCT	Cosmetic appearance after 3 months Duration of treatment Pain during treatment Time to resume normal activities.	No significant difference in cosmetic appearance. Conservative management led to shorter duration of treatment (NOT statistically significant). Conservative management led to less pain (NOT statistically significant). Mean time to resume normal activities the same in both groups.	Small study. No differentiation between location of the wounds on the hand made; in particular palm vs finger and dorsal vs volar. Concerns over correct use of wound nomenclature. Were these "lacerations" actually incisions?

RCT, randomised clinical trial

► CLINICAL BOTTOM LINE

Uncomplicated hand lacerations less than 2cm should be treated conservatively.

BET editor's comment

The paper by Quinn *et al* attracted a flurry of correspondence. Much of it focused on the need for a proper evaluation of these wounds by a competent person.

Patel J, Coull R, Harris PA, *et al*. Hand lacerations: An audit of clinical examination. *The Journal of Hand Surgery: Journal of the British Society for Surgery of the Hand* August 1998;**23**(Issue 4):482–484.

McNicholl BP, Martin J, McAleese P. Subclinical injuries in lacerations to the forearm and hand. *British Journal of Surgery* 1992 Aug;**79**(8):765–7.

Quinn J, Cummings S, Callahan M, *et al*. Suturing versus conservative management of lacerations of the hand: randomised controlled trial. *BMJ* 2002;**325**(7539):299.

foreign body, tendon injury, bone injury, joint injury, or neurovascular injury.

Search strategy

OID interface on the world wide web. 1966–January 2007

Cochrane Database of Systematic Reviews, January 2007

[(hand wound\$.mp.) OR (hand laceration\$.mp.) OR (hand injury.mp. or exp Hand Injuries)] AND [antibiotic\$.mp. or exp Anti-Bacterial Agents/]

Search outcome

Altogether 346 articles were found. Limiting it to "humans and English language" reduced the number to 237. Only five papers directly addressed the question. No additional papers were found in Cochrane.

Comment(s)

These studies do not show any statistically significant difference in wound infection rates in uncomplicated hand lacerations in patients receiving either prophylactic antibiotics or not receiving antibiotics.

► CLINICAL BOTTOM LINE

No evidence to suggest prophylactic antibiotics reduce the rate wound infection in uncomplicated hand lacerations.

BET editor's comment

Antibiotics would not normally be given IM now.

Grossman JAI, Adams JP, Kunec J. Prophylactic Antibiotics in Simple Hand Lacerations. *JAMA* 1981 March 13;**245**(10):1055–6.

Haughey RE, Lammers RL, Wagner DK. Use of antibiotics in the initial management of soft tissue hand wounds. *Annals of Emergency Medicine* 1981 April;**10**(4):187–192.

Roberts AHN, Teddy PJ. A Prospective Trial of Prophylactic Antibiotics in Hand Lacerations. *British Journal of Surgery* 1977 Jun;**64**(6):394–6.

Beesley JR, Bowden G, Hardy RH, *et al*. Prophylactic antibiotics in minor hand injuries. *Injury* 1975 May;**6**(4):366.

Whittaker JP, Nancarrow JD, Sterne GD. The role of antibiotic prophylaxis in clean incised hand injuries: a prospective randomized placebo controlled double blind trial. *J Hand Surg [Br]* 2005 May;**30**(2):162–7.

Prophylactic antibiotics are not indicated in uncomplicated hand lacerations

Report by Shafic S Al-Nammari, *SHO Orthopaedics and Trauma*

Search checked by Adam J Reid, *SHO Plastic Surgery St Thomas' Hospital & Aberdeen Royal Infirmary*

doi: 10.1136/emj.2007.046821

Abstract

A short cut review was carried out to establish whether prophylactic antibiotics should be used as part of the management of uncomplicated hand lacerations. From a search of 237 papers only five presented trials addressing the clinical question. The author, date and country of publication, patient group studied, study type, relevant outcomes, results and study weaknesses of this paper are tabulated. The clinical bottom line is that there doesn't appear to be any evidence to support the use of prophylactic antibiotics in uncomplicated hand lacerations.

Three part question

In [a patient with an uncomplicated hand laceration] does [the use of prophylactic antibiotics] lead to a [reduced incidence of wound infection]?

Clinical scenario

A patient attends the emergency department with an 'uncomplicated' hand laceration. You wonder whether prophylactic antibiotics are indicated to try to reduce the risk of infection. 'Uncomplicated' is taken to mean a wound with no fracture,

C Reactive Protein and the diagnosis of intracranial infection

Report by Amy Au-Yong, *Medical Student*

Search checked by Professor Tim Coats, *Professor of Emergency Medicine*

Emergency Department, Leicester Royal Infirmary

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