Clark RF, Selden BS, Furbee B. The incidence of wound infection following crotalid envenomation. *J Emerg Med* 1993;11:583–6. Kerrigan KR, Mertz BL, Nelson SJ, *et al.* Antibiotic prophylaxis for pit viper envenomation: prospective, controlled trial. *World J Surg* 1997:21:369–73. Blaylock RS. Antibiotic use and infection in snakebite victims. *South African Med J* 1999;89:874–6.

Activated charcoal and gastric absorption of iron compounds

Report by Steve Jones, Specialist Registrar

Checked by Baha Ali, Senior Clinical Fellow

Abstract

short cut review was carried out to establish whether activated charcoal is effective in iron overdose. Altogether 17 papers were found using the reported search, of which only one was relevant. The author, date and country of publication, patient group studied, study type, relevant outcomes, results and study weaknesses of this paper are shown in table 4. A clinical bottom line is stated.

Clinical scenario

A young woman presents to the emergency department having taken an overdose of her iron tablets. She is in an emotionally distressed state but is cardiovascularly stable and requests treatment. It has been less than two hours since she took the tablets and you prescribe activated charcoal. You wonder whether this will actually do her any good.

Three part question

In [a patient with an iron overdose] is [activated charcoal better than nothing] at [reducing gastric absorption, mortality or morbidity]?

Search strategy

Medline 1966–10/01 using the OVID interface. {(exp poisoning OR poisoning.mp OR exp overdose OR overdose.mp)} AND (exp iron OR exp iron compounds OR iron.mp) AND (exp charcoal OR charcoal.mp OR activated charcoal.mp)} LIMIT to human AND English.

Search outcome

Altogether 17 papers found of which only one was relevant to the original question.

Comment(s)

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This study partially answers the question and concludes that more work needs to be done. In the doses given to these healthy patients, activated charcoal reduced absorption; this was reduced further by adding desferrioaxamine to the oral solution. Toxic doses are considered to be fourfold higher than the doses used in the study and treatment in this group of patients depends on clinical features.

CLINICAL BOTTOM LINE

Giving oral activated charcoal may well reduce gastric absorption after iron overdose.

Gomez HF, McClafferty HH, Flory D, *et al*. Prevention of gastriointestinal iron absorption by chelation from an orally administered premixed deferoxamine/charcoal slurry. *Ann Emerg Med* 1997;**30**:587–92.

Antibiotics after puncture wounds to the foot

Report by Magnus Harrison, Clinical Reseach Fellow

Checked by Martin Thomas, Research Fellow

Abstract

short cut review was carried out to establish whether antibiotics reduce infective complications after puncture wounds to the foot. A totla of 29 papers were found using the reported search, of which none answered the question posed. Further research is needed in this area.

Clinical scenario

A 32 year old man presents with a pedal puncture wound, which was sustained four hours before attending the emergency department. You wonder whether antibiotics should be prescribed to reduce infective complications.

Three part question

In [patients presenting with pedal puncture wounds] does the [administration of antibiotics] reduce [infective complications]?

Search strategy

Medline 1966–10/01 using the OVID interface. [(exp foot injuries OR exp foot OR feet.mp OR foot.mp OR pedal.mp OR plantar.mp) AND {(exp wounds and injuries OR injur\$.mp) AND (penetrate\$.mp or penetrating.mp OR exp punctures OR puncture\$.mp) OR exp wounds, penetrating)}] AND (exp antibiotics OR antibiotic\$.mp) LIMIT to human AND English.

Search outcome

Altogether 29 papers found of which none were relevant to the original question.

Comment(s)

While there are many review articles in this area, there appears to be no published evidence to underpin the views expressed.

► CLINICAL BOTTOM LINE

Local advice should be followed.

Author, date and country	Patient group	Study type (level of evidence)	Outcomes	Key results	Study weaknesses
Gomez HF <i>et al,</i> 1997, USA	11 healthy adult volunteers	Controlled, prospective crossover study	Maximum serum iron concentration: - iron only - iron plus activated charcoal (AC) - iron plus AC plus desferrioxamine	150 μg/dl 36 94 μg/dl 23 37 μg/dl 13 (p 0.0017)	Healthy volunteers Strict exclusion criteria Physiological doses of iron rather than toxic doses
			Time to maximum serum iron concentration:		
			- iron only	3.5 h 0.3	
			- iron plus AC	3.6 h 0.5	
			- iron plus AC plus desferrioxamine	3.0 h 1.0	