

ANTIBIOTIC PROPHYLAXIS AT TRIAGE FOR SIMPLE TRAUMATIC WOUNDS: A PILOT STUDY

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Introduction

- Administration of prophylactic antibiotic therapy with the intention of reducing subsequent infection rates for wounds closed in the emergency department (ED) remains controversial

Methods

- ⦿ Randomized, placebocontrolled, pilot study
- ⦿ A sample of patients presenting to the ED with simple traumatic wounds during 2008 to 2010. (at least 16 years of age)
- ⦿ Simple traumatic wounds: lacerations extending through the dermis as a result of blunt or penetrating traumatic insult, and not found to involve critical deep structures (bone, tendon, nerve, vessels), and requiring closure (suture or taping), in the ED.

Methods

- ⦿ Exclusion criteria:

1. allergy to penicillin-based antibiotic drugs
2. having received antibiotic therapy before ED presentation
3. wounds resulting from animal or human bites
4. immunocompromised patient
5. Multiple wounds
6. failure to consent

- ⦿ Experimental Group: 1 g oral flucloxacillin

- ⦿ Control Group: placebo

Methods

- telephone interview 1 month after wound closure to determine the presence or absence of developed wound infection.
- Wound infection if reported; repeated presentation to ED or practitioner with diagnosis of wound infection

Results

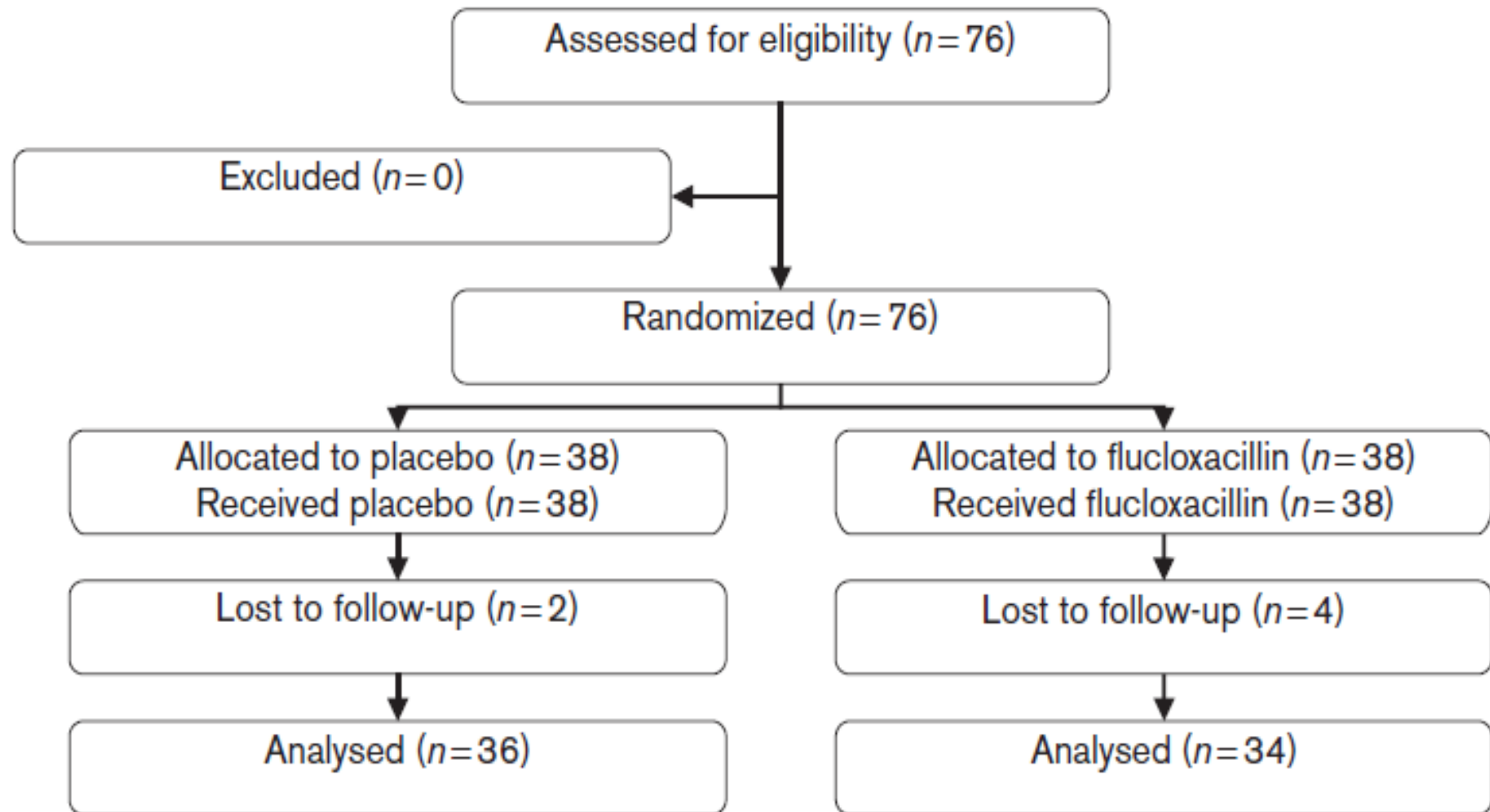


Table 1 Patient demographic details, postinjury antibiotic prophylaxis, and wound infection rates

	Placebo group (<i>n</i> =36)	Flucloxacillin group (<i>n</i> =34)	<i>P</i> value
Age (years)	34.0 (28.9–39.1)	33.9 (28.0–39.0)	0.988
Sex (M:F)	21 : 15	8 : 26	0.131
Smoking	10 (28%)	14 (41%)	0.315
Diabetes mellitus	1 (3%)	1 (3%)	1.000
Wound site			
Hand	12 (33%)	13 (38%)	0.804
Arm	10 (28%)	8 (24%)	0.787
Face	6 (17%)	8 (24%)	0.557
Leg	8 (22%)	5 (15%)	0.543
Methods of closure			
Suture	35 (97%)	31 (91%)	0.350
Taped	1 (3%)	2 (6%)	0.609
Tissue adhesive	0 (0%)	1 (3%)	0.493
Time from antibiotic to wound closure (minutes)	64.3 (36.4–91.9)	75 (71.7–98.3)	0.552
Postclosure antibiotic prescription	3 (8%)	4 (11%)	0.706
Wound infection	6 (17%)	4 (12%)	0.736

- **The results of this study do not support administration of prophylactic antibiotic treatment .**

Conclusion

- prophylactic administration of oral flucloxacillin at patient triage failed to reduce subsequent rates of wound infection for simple traumatic wounds managed in the ED.

Discussion

- ⦿ number of enrollments was too small
- ⦿ Others parameter: time from injury occurrence to ED presentation and so on

Thank you for your attentions