

Ladders: A Weapon of Mass Destruction?

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Ladders

- Young fit people with isolated orthopaedic injuries?
- Darwinian selection for ethnic elderly males, climb the ladder, reach for the olive!



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Study details

- Retrospective case review RAH Trauma Service
- July 2000-December 2003
- Fall from ladder, scaffold, building, tree
- 282 patients fulfilled criteria

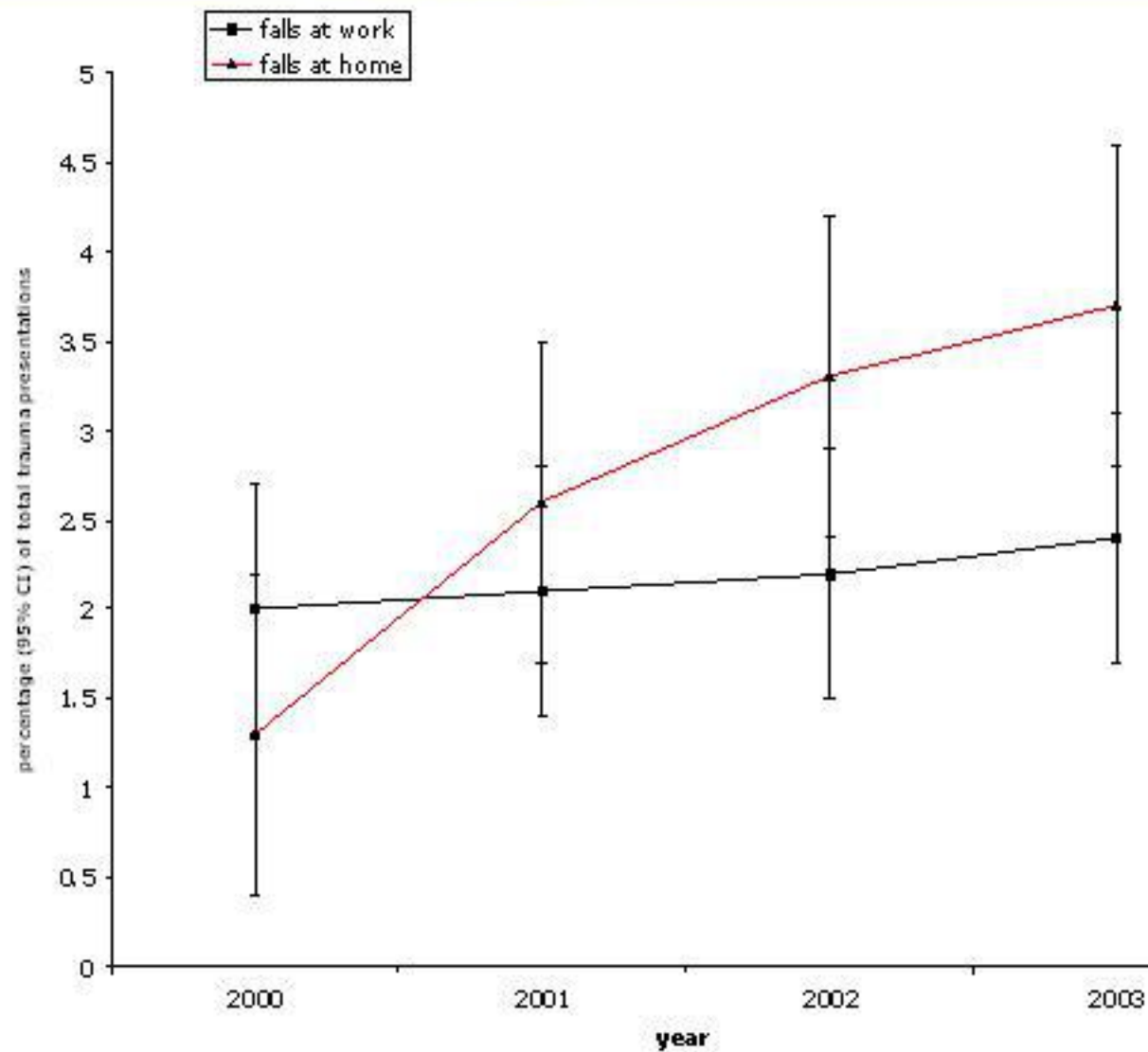


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Figure 1

Presentations due to falls from heights as a percentage of the overall trauma presentations





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Table 1: Population demographics of injured patients

Male	115	141	256 (91.0%)
Female	5	21	26 (9.0%)



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Table 2: Mechanism of falls at work and home

Fall from	Work	home	total
Tree	7	9	16
Building	74	70	144
Ladder	30	79	109
Scaffold	9	4	13



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Spectrum of injuries

- Six major intra-abdominal injuries sustained by patients at home
- 4 spleen required surgery
- 1 bladder rupture
- 1 liver laceration both managed conservatively



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Hospital stay

- 197 patients (70%) were admitted >24 hours
- Median 3 days
- LOS increased with age and ISS



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The Impact of Drugs (Other than Alcohol) on
Road Crashes, Assaults and Other Trauma

A Prospective Trauma Toxicology Study

Awaiting release of final report



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Death rate

- Home 4.6/100 patients injured
- Work 4.2/100 patients injured
- Deaths from home injuries had median age 20yrs > than working group



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Table 5: Distribution of deaths by mechanism and group

Place	Number of deaths (% of total injured)	Median age in years (range)	Median ISS (range)	Fall from: n (%)			
				Tree	Building	Ladder	Scaffold
Work	5 (4.2)	53 (44 – 74)	25 (25 – 54)	1 (20.0)	3 (60.0)	1 (20.0)	0 (0)
Home	8 (4.9)	73 (49 – 86)	26 (16 – 54)	1 (12.5)	0 (0)	6 (75.0)	1 (12.5)
All	13 (4.6)	62 (44 – 86)	26 (16 – 54)	2 (15.3)	3 (46.2)	7 (53.8)	1 (7.7)



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Conclusions

- What are the accidents due to?
- Ladder
- Improper use
- Lack of safety devices/supervision
- Weather
- Pre-existing medical condition
- ETOH/drugs



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solutions

- Hospital posters, televisions
- Media awareness campaign
 - tv, local/state newspaper
- Pamphlets, hospital, GP, hardware store
- Council, services, help for elderly
- Attorney General, ie baby bath seat



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Further research

- Traumatox out soon
- Prospective study with questionnaire to patient
- Identify specific variables to target
- Remember your age and don't see yourself as Superman!



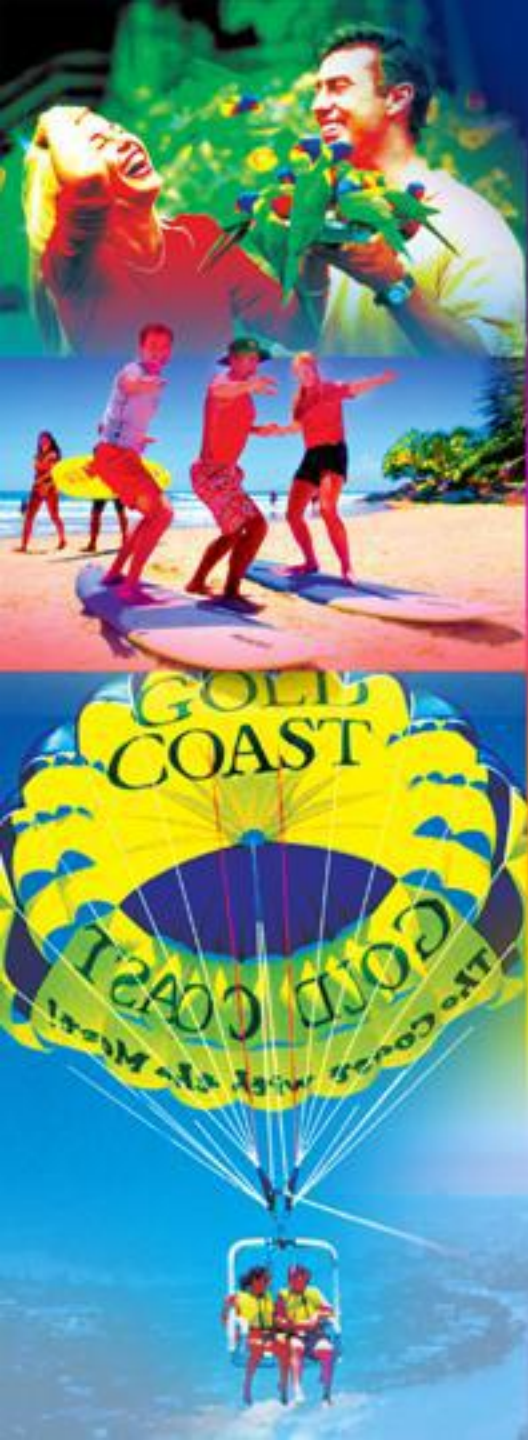
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28 September to 1 October 2006
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2nd Combined Australasian Trauma Society (ATS)
and Early Management of Severe Trauma (EMST) Conference



13 5 2003

Table 3: Number of injuries sustained per person by group

	Work	Home
No of injuries	No of patients	No of patients
Minor	13	19
1	53	64
2	34	62
3	15	13
4	4	4
5	1	0



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Overview

- Ladders are bad
- People die falling off ladders
- These are preventable deaths
- These are elderly
- We can do something about this
- We need to understand more about this



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Why do it?

- Apparent increase in numbers
- Apparent increase in elderly injured/dying
- Hospital stay length
- Use of blood products
- Can we do something to prevent?



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Why do it?

- Backyard Blitz, Rennovate or Detonate
- Better Homes and Gardens
- Bushfires, leaves in gutters
- DIY



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