

# The perils of pet ownership: a new fall-injury risk factor

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Pet ownership has been associated with a number of benefits, and an editorial in this Journal in November 2003 argued that pet ownership conferred health benefits, but the mechanism was unknown.<sup>1</sup> It has also been suggested that pet ownership may have a negative effect on the health of elderly people because of the risk of falls.<sup>2</sup> Falls among older people are common and are a major cause of injury; environmental hazards are well known as causes of falls and injuries.<sup>3,4</sup> However, pets are rarely mentioned as an environmental hazard, and no studies have looked at actual fall-related injuries caused by pets.

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## ABSTRACT

**Objective:** To describe fall-related injuries due to pets in an older population.

**Design:** Case series.

**Participants and setting:** Patients aged 75 years and over presenting to the emergency department of a metropolitan hospital in northern Sydney over 18 months, with a fracture directly related to their pet.

**Main outcome measures:** Type of fracture; circumstances of injury.

**Results:** 16 cases (mean patient age, 81 years) are described; 13 (81%) involved women. Animals of five species were involved, with cats and dogs being the most common pet hazard.

**Conclusions:** Pets are a potential environmental hazard in the occurrence of fall-related injuries in older people, with dogs and cats most likely to be involved. Women appear more likely than men to be injured.

MJA 2004; 181: 682–683

## METHODS

Cases of pet-related falls occurring in patients aged 75 years and over who presented to the emergency department of a metropolitan hospital in northern Sydney between 1 April 2003 and 30 September 2004 were noted, and patients who sustained a traumatic fracture as a result of the fall were included in this case series. A pet was defined as “an animal which is kept as a companion and is treated with affection” and included animals such as

goats and donkeys, as well as dogs, cats and birds.

Our series does not include a number of cases where animals were responsible for inflicting other injuries, such as dog bites, cat scratches or soft-tissue injuries due to falls. It also does not include the fall-related fractures which occurred as a result of older people being startled by mice, cockroaches or spiders, as these animals were not considered pets for the purpose of this study.

## RESULTS

We identified 16 cases, 13 (81%) in women. Animals implicated included dogs, cats, birds, goats and a donkey. The cases are summarised in the Box. There were no deaths recorded as a result of the fall-related fractures, but one of the animals involved (a cat) died when its owner fell and landed on it.

## DISCUSSION

This study shows that serious fall-related injuries in older people may be caused by pets, most commonly dogs and cats. An Australian Bureau of Statistics (ABS) survey of pet ownership in 1994 indicated that 16% of the people aged over 60 years owned a dog, 15% owned a cat, and 9% owned a bird.<sup>5</sup> It is not clear from that survey what proportion of people aged 75 years and over owned a pet, but our case series illustrates the risks that may be present for those who do.

Very few studies of factors related to falling identify pets as a hazard, and none have studied the risk in detail. Further research is necessary to understand the risk that pets pose, and to consider possible interventions to decrease this risk (such as ensuring pets are confined at time of activity, and being aware of the pet's favourite sleeping position).<sup>4</sup> It is important that any risks posed by pets be reduced as much as possible to allow the benefits of pet ownership to be properly appreciated.

## COMPETING INTERESTS

None identified.

## REFERENCES

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(Received 13 Oct 2004, accepted 1 Nov 2004) □

## Summary of case series of pet-related fracture

Patient no.	Age (years)	Sex	Fracture	Pet	Circumstances of fracture
1	78	Female	Femoral neck	Goat	Climbing stile over fence to feed mohair goats, slipped and fell to ground.
2	83	Female	Pelvis	Cat	Tripped over cat, landed on cat. Cat deceased.
3	84	Male	Neck of humerus	Dog	Taking Jack Russell terrier for walk using retractable leash. Dog ran round and round patient's legs and pulled him over.
4	81	Female	Pelvis	Donkey	Feeding donkey from bucket. Donkey nudged patient, pushing her over backwards.
5	79	Male	Wrist	Bird	Budgerigar escaped from cage, perched on curtain rail. Patient stood on chair to reach bird and fell
6	78	Female	Ribs	Dog	Slipped on puddle of urine from new Labrador pup. Fell against wooden arm of armchair.
7	88	Female	3rd cervical vertebra	Cat	Fell backwards over cat, landing on back with impact on posterior skull.
8	76	Female	Nasal bones	Dog	Fell forwards while trying to prevent young puppy from diving into fish tank.
9	81	Female	Ankle	Bird	Tripped down steps while carrying bird cage (containing canary) outside to clean it.
10	75	Male	Ribs	Dog	Walking two greyhounds on leashes along street. Dogs pulled and patient slipped and fell against fence.
11	80	Female	Neck of humerus	Cat	Reaching down to pick up cat's food dish. Cat leant against legs and patient fell forwards over cat.
12	83	Female	Wrist	Cat	Fell sideways in garden while trying to stop cat catching a blue tongue lizard.
13	82	Female	Femoral neck	Cat	Tripped over black cat in darkened hallway.
14	86	Female	Pelvis	Dog	Bringing garbage bin in from street while having golden retriever on leash. Became caught between garbage bin and dog, and fell.
15	83	Female	Neck of humerus	Dog	Carrying small dog on veranda, tripped and fell onto tiled stairs.
16	80	Female	Pelvis	Cat	Fall while attempting to move quickly out back door as cat carried live snake in through side door.