Incidence of Foreign Bodies Caused by Fibrous Non-Food Cage Accessories in Adult Cockatiels and Lorikeets

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Rope toys and "snugglies" (triangular shaped fluffy "sleeping nests") are increasingly popular cage accessories. They are beginning to replace natural native plant furniture in cages. In an 18 month period the Bird and Exotics Veterinarian Clinic has seen an increase in the number of foreign bodies caused by the non-natural accessories including toys, covers and snugglies. In cockatiels (*Nymphicus hollandicus*) these have been seen in the ingluvius. In Australian lorikeets (*Trichoglossus spp*.) the fibres were found in the ventriculus. The viability of non-surgical intervention for removal of fibres from the crop as a treatment option in contrast to ingluviotomy is also discussed.

Results

Foreign Body	Number
Rope or synthetic toys	4
Snugglies	1
Coconut fibre toy	1*
Towel	2*
Unknown (carpet or cage cover?)	1
Total	9

Table 1. Cockatiel cases (eight birds with nine incidents) of fibrous non-food item foreign bodies in the crop. *One cockatiel was seen twice. The first time with coconut fibres, the second time with towel fibres adhered to the previous ingluvial surgical wound.

In addition, there were three lorikeets: a rainbow lorikeet, an olive and a scaly breasted lorikeet. All were consistent with being from "snuggly" fibres in the ventriculus, and were fatal in all cases.

Summary of Cases

Nine out of twelve total cases in lorikeets and cockatiels were from internal cage accessories, two were from exterior accessories (cage coverings) and one from an unknown source suspected to be carpet fibres. Six out of nine cockatiel cases were from internal cage accessories. All the confirmed fibrous non-food item foreign bodies in the lorikeets were suspected to be from internal cage accessories consistent with being from snugglies.

No other species was seen with a fibrous non-food item foreign body during the 18 month period of the study. In the cockatiels, fibrous non-food item foreign bodies all presented as ingluvioliths. Six out of nine cockatiels had presented for vomiting. Not all the cockatiel cases were diagnosed on the first consultation. This may be due to the small initial amount of fibres in the crop leading to an initial diagnosis of a bacterial/fungal ingluviitis.

Signs observed included weight loss and a history of chronic regurgitation. The birds continued to pass faeces, including the lorikeets, despite at necropsy appearing to have their gastro-intestinal tract at some point blocked with fibres.

Cockatiels

Nine incidents in eight birds with seven surviving cases. One died on arrival. One died post-intervention.

Crop surgery (ingluviotomy)

Three cases anaesthetised and ingluviotomy performed under isoflourane anaesthetic. All surgeries were initially successful. One of the three had an ingluviolith from a coconut cage accessory. This cockatiel was re-admitted seven months later for weight loss. It then had a further fibrous ingluviolith caused by a cage cover towel. The second time the bird was crop washed and the bird regurgitated the foreign body out. There is the question of whether surgery caused the second problem, as the towel fibres adhered to old surgical wound.

Crop non-surgical per oral removal

Five were treated with non-invasive procedures.

Two non-anaesthetised cases with smaller fibrous ingluvioliths were successfully removed by crop washing with Hartman's solution combined with manual palpation to break down the fibres.

Three cases were treated with removal using forceps under isoflourane anaesthetic with the bird held in an upright position. One died two days after the procedure but was in such a serious condition at the time of admission that euthanasia had been initially considered. In this case fibre removal was only attempted in order to alleviate the severe dyspnoea from suspected aspiration and the pharyngeal/choanal foreign body blockage.

Lorikeets

Three cases. Two dead on arrival and one dead post proventricular/ventriculotomy. Two had had chronic vomiting, and also palpably and radiographically swollen ventriculus. One dead on arrival with no previous clinical signs.

Discussion

Fibrous non-food item foreign bodies are well recognised in adult pet parrots. In this study the aim was to find the common causes of these fibres. A previous study[2] of 133 crop biopsies showed that 2% (3 cases) of ingluviitis cases were foreign bodies. A previous set of four cases[4]describes non-food item foreign bodies of which two were synthetic fibres from outside the cage.

The aim of this set of twelve cases was to identify the parts of the cage material and accessories as the cause of the fibrous foreign bodies. This is in order to suggest that preventative measures be taken in these cockatiels and lorikeets to decrease access to these hazards, as the sudden cluster of cases over an 18 month period was only seen in these two species. The cockatiels seemed to be particularly over represented. This may be due to their picking and grooming of these particular toys, the increased popularity of these toys, but also in part due to the higher comparative proportion of cockatiels seen at the veterinary clinic compared with other bird species.

The lorikeets' foreign bodies were more difficult to diagnose as they were in the ventriculus. The actual incidence of ventricular fibrous non-food item foreign bodies is suspected to be higher than this study documents.

Two further lorikeets were not included in the study as no definitive diagnosis was made. In these birds the signs on radiographs, history of exposure to snugglies and fibres passing in their faeces were highly suggestive of snuggly ingestion. Several other parrots with similar histories of chronic vomiting and access to rope toys which resolved post removal of the cage accessories were also not included. These were also anecdotally attributed to have been caused by fibrous non-food item foreign bodies.

The conclusion is that many fibrous non-food cage accessories are not safe in or around cockatiels and lorikeets. Any psittacine with vomiting of unknown cause should also have these accessories removed as a precaution.

Conclusions

1. Cockatiels seem to be over represented with crop foreign bodies from fibrous non-food items.
2. Stringy material, especially rope toys, were the most common finding in cockatiels with fibrous non-food item foreign bodies and should be considered as possible primary causes in many vomiting cockatiels with bacterial/fungal crop infections.
3. Lorikeets and cockatiels with continual vomiting should have snugglies, rope toys and cage covers examined for ingestion.

4. Per oral approach for removal of fibrous foreign bodies in the crop of cockatiels is a viable option in many selected cases.
5. Snugglies are not necessarily appropriate safe cage accessories for lorikeets.

References

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