A swallowed needle in a cat treated for feline hyperaesthesia syndrome

THE INJURY
I first saw the patient, a 4.5 kg domestic shorthair cat, when it was presented for its annual vaccinations at 3 years old. It had sustained a severe crush injury to the right hind leg in a road traffic accident 2 years earlier, necessitating amputation. On examination, the cat had an area of alopecia along the dorsum, extending from the thoracolumbar junction to the pelvis, caused by excessive self-grooming. Sometimes the cat appeared to attack its back. When I touched the lumbar area a twitch response and muscle spasm were elicited, and dorsal skin rippling and piloerection were present. The cat began to growl with stronger palpation to the area. I found significant discomfort on palpation of the longissimus dorsi muscles, especially in the thoracolumbar area with multiple myofascial trigger points (MTrPs), often seen in animals after limb amputation owing to the alteration in gait. The owners informed me that the cat had become less social since the onset of the signs and occasionally twitched whilst being stroked, jumped off the owner and ran away. Frantic licking behaviour often followed. Trichograms and skin scrapes disclosed no underlying dermatological problems and there were no lesions visible on the skin in the alopecic areas. No other abnormalities were found on clinical examination. Feline hyperaesthesia syndrome was considered to be the most likely diagnosis, possibly caused by phantom pain, as the symptoms had first appeared after amputation.

Drug and acupuncture treatment were discussed with the owner, who opted for the latter. I had previously treated several dogs with acral lick dermatitis and several cats with feline psychogenic alopecia (both obsessive-compulsive disorder type conditions) using acupuncture. Responses were variable but mostly positive. This was the first case of feline hyperaesthesia syndrome I had treated. As there was a possibility of phantom pain due to the missing limb and palpable MTrPs in the lumbar muscles, I felt the prognosis was good. Success with acupuncture has been demonstrated in animals with behavioural disorders, stereotypic behaviours, skin problems and pain.1

ACUPUNCTURE TREATMENT
The cat was treated lying in its carrier basket using 1.5 mm×0.25 bimetallic needles. I generally begin with GV14 in cats as this is a well-tolerated point and a good indicator as to how the cat will react. The cat remained calm and tolerated this point well. I added points GV4, GV3, BL23 and BL25, which corresponded with some of the MTrPs. Touching of the back and needle insertion led to muscle twitching, piloerection and some vocalisation but she settled after several seconds. She froze for several minutes but then moved, which caused severe muscle twitching in the back. The cat growled and turned to attack her back. It is not unusual for animals with significant pain, hyperaesthesia or MTrPs to try to attack or pull a needle out. I attempted to scruff her so I could remove the needles but she tried to attack me. She turned, grabbed one of the needles in her mouth and swallowed it immediately. I quickly removed the other needles and took a conscious radiograph of the cat, which showed the needle in the oesophagus with the blunt end towards the stomach (figure 1). As it was positioned this way I decided not to induce emesis and on discussion with the owner we decided to see if the needle passed through without incident, which it did the following day with no associated discomfort. The cat’s normal diet consists of a mixture of dry and tinned food, which we did not change.

Despite the violent response to the treatment and the swallowed needle, the owners noticed a response in the following days, with less licking activity, so they returned for more treatment a week later. An Elizabethan collar was placed on the cat throughout treatment to prevent a recurrence of the needle swallowing. Again the needles in the Bladder meridian produced an extreme response but the cat relaxed much more rapidly and became soporific. This calm nature was seen for 48 h after the second treatment and the cat stopped hair pulling during this time. The cat had another three treatments, weekly. By this time she had stopped all licking and self-biting and was much calmer when touched. The hair began to grow in the alopecic areas. The cat has been returning for treatment for several years now, and the symptoms have not recurred so long as the treatment interval has been kept at 21 days. She is much more amenable to treatment and sleeps throughout the session after needle insertion, though I still use an Elizabethan collar (figure 2). The owners were very pleased with her response and say that her behaviour at home has changed and she has become much more sociable.

COMMENT
In cats stressful stimuli are thought to release α-melanocyte-stimulating hormone, which leads to both increased grooming and endorphin production.2 Feline hyperaesthesia syndrome is a recognised condition of exaggerated sensitivity to touch over the spine to the base of the tail.3,4 Responses vary from twitching of the skin and tail, repeated rippling of the panniculus muscle, vocalisation, aggression, muscle spasms, biting at the tail, flanks and sides, sometimes leading to severe lesions.3 There is a significant overlap between psychogenic alopecia and feline hyperaesthesia syndrome, though it is thought that the latter is more difficult to treat.3 Feline hyperaesthesia has also been called atypical neurodermatitis, twitchy cat disease and rolling skin syndrome.5 Aggression towards self,
people or other animals has been reported. Self-mutilation and excessive grooming are recognised signs of obsessive-compulsive disorder in the cat. Injury is seen as a predisposing factor to feline hyperaesthesia syndrome and neuralgic pain is recognised in cats. Itch and pain share peripheral and central pathways so it can be hypothesised that underlying pain could cause excessive grooming.

Drug treatments have been used with varying degrees of success in treating feline hyperaesthesia syndrome, including benzodiazepines, tricyclic antidepressants, selective serotonin reuptake inhibitors and gabapentin. The response of some cases to the last of these suggests that neurogenic pain might be an important factor in the development of this syndrome. I could find no published reports of acupuncture treatments for this condition, despite the success in this case.

Several cases of swallowed needles in dogs have been reported. Some needles have been recovered by inducing emesis or changing the diet. In this case I simply monitored the patient and the needle passed without incident.

As the exaggerated response seen with feline hyperaesthesia syndrome was replicated by needling it is advised that appropriate precautions are taken when treating cats with this condition, including the use of an Elizabethan collar.

Dónal J O’Leary

Correspondence to Dónal J O’Leary, 1 Windmill Close, Heathfield, East Sussex TN21 8PA, UK; donaloleary@msn.com

Competing interests None declared.

Provenance and peer review Not commissioned; externally peer reviewed.

To cite O’Leary DJ. Acupunct Med Published Online First: [please include Day Month Year] doi:10.1136/acupmed-2015-010807

Accepted 28 April 2015

REFERENCES

2 Schaefer M. Clinical medicine of the dog and cat. 2006.

Figure 1 Radiograph showing the swallowed needle in the distal oesophagus.

Figure 2 The cat receiving treatment wearing an Elizabethan collar.
A swallowed needle in a cat treated for feline hyperaesthesia syndrome

Dónal J O’Leary

Acupunct Med  published online May 18, 2015

Updated information and services can be found at:
http://aim.bmj.com/content/early/2015/05/17/acupmed-2015-010807

These include:

References

This article cites 6 articles, 0 of which you can access for free at:
http://aim.bmj.com/content/early/2015/05/17/acupmed-2015-010807#ref-list-1

Email alerting service

Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

Notes

To request permissions go to:
http://www.bmj.com/company/products-services/rights-and-licensing/

To order reprints go to:
http://journals.bmj.com/content/subscribers

To subscribe to BMJ go to:
http://group.bmj.com/subscribe/