A new technique for repairing feline symphyseal separations

Avoiding complications in the repair of symphyseal separations with the use of a wire and acrylic intra-oral splint to stabilise the rostral mandible

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Jaw fractures are a common traumatic pathology in our domestic patients. Separations of the mandibular symphysis are seen in cats perhaps more than any other orthopaedic injury. As a fibrous union and a prominent area of the rostral face, it is at risk primarily in road traffic accidents and sometimes in high-rise falls. This article will challenge some of the well-established techniques and present the reader with an alternative and more reliable technique for repair.

Symphyseal separations account for between 11 and 20% of all orthopaedic traumas and 73% of all craniofacial injuries in cats. Visually, they can be very easy to diagnose, and the injury is often clear on conscious examination (Figure 1). However, radiographic or CT imaging of the skull is still essential as approximately a third of these cats will also have other craniofacial trauma. It is this additional craniofacial trauma that is likely to affect the outcome of surgical treatment.

The traditional technique
The most commonly-described technique for repairing symphyseal separations is to place a cerclage wire around the rostral mandible (Figure 2). This can be done by passing the wire through two large hypodermic needles placed either side of the rostral mandible. Once placed, the cerclage wire is tightened and knotted outside the skin on the ventral aspect of the mandible.

This is a useful technique to master as it provides a more straightforward and reliable repair to this very common orthopaedic injury

There are, however, some significant concerns regarding this repair. Firstly, the position of the wire around the rostral mandible is often close to the neurovascular bundle that emerges from the middle mental foramen. As the