Update on use of TTA Rapid® technique. (See pages 2&3)

Miniature Pinscher survives attack by two Mastiffs!

“Rex, ” a 5 year old MN Miniature Pincher

History:
Attacked by two Mastiffs in the park. Multiple deep “crush” type bite wounds, including an open comminuted fracture of the right femur, resulting in an abscess in the fracture site and large area of thigh muscle necrosis. Rex was referred to Kydd & Kydd by his primary care practice.

Surgery (Following medical stabilisation):
Surgical exploration, debridement of necrotic soft tissue and devitalised bone fragments. Reduction and stabilisation of right femur utilising a unilateral external fixator (ESF) with six positive profile pins and acrylic / steel connecting bar. An intramedullary pin was “tied in” to the ESF proximally to augment stability.

Outcome:
The i/m pin was removed after 9 weeks and the ESF after 13 weeks. Rex made a recovery to full pain-free function without subsequent complications. As his owner’s commented “He is a very spirited and very lucky little dog. He must have a guardian angel!”
TTA Rapid (Tibial Tuberosity Advancement Rapid) for treatment of cranial cruciate ligament injuries in dogs

Update on clinical results 50 cases. June 2014

Introduction

The TTA Rapid technique has been available in the UK since April 2013. It combines the best features of several previous tibial levelling procedures, including TTO (Triple Tibial Osteotomy), MMT (Modified Maquet Technique) and MMP (Modified Maquet Procedure). The principle behind each of these techniques is to eliminate cranial tibial thrust by advancing the tibial tuberosity a specific distance, so that the straight patellar ligament is at right angles to the tibial plateau. (The tibial tuberosity is the point of insertion of the straight patellar ligament). The straight patellar ligament therefore acts to stabilise cranial tibial thrust.

Advantages of the TTA Rapid technique

- Relatively non-invasive soft tissue approach, to the craniomedial tibia. This allows rapid healing and minimises post-operative discomfort.
- Robust tibial tuberosity advancement utilising a low profile titanium cage, anchored by either 4 or 6 titanium screws depending on patient size.
- Accurate placement of the osteotomy site by specially designed templates, which minimise surgeon errors.
- The titanium cage is manufactured in Germany, by Rita Leibinger, utilising the latest laser 3D printing techniques.
- Titanium is extremely strong, light and is the most biocompatible implant material available at the present time. The titanium cage has pores with a “honey comb” structure, which allows ingrowth of tibial bone into the cage, maximising tibial tuberosity strength. This minimises the risk of implant loosening, rejection and infection.
- A hydroxyapatite bone graft is placed in the pores of the cage and the osteotomy site to maximise the speed of TTA Rapid healing. (Radiographic evidence of bone healing is fairly advanced after 6 weeks).
Evidence based medicine: Kydd & Kydd TTA Rapid Results

50 clinical cases with a follow-up period of 4 to 9 months.
Dates of surgery - May 2013 to February 2014.
Age of patients at surgery - 1yr 1m to 10yr 10m (mean 6 yr 1m)
Body weight of patients at surgery - 12.6 to 49.7 kg (mean 30.2kg)
Leg affected - R:22   L:28
Number of bilateral cases - 4
Gender - ME: 5   MN:12   FE: 6   FN: 27

Breed affected

<table>
<thead>
<tr>
<th>Breed</th>
<th>Count</th>
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<tbody>
<tr>
<td>Labrador</td>
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<tr>
<td>Cross Breed</td>
<td>9</td>
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<tr>
<td>Staffordshire Bull Terrier</td>
<td>7</td>
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<td>Golden Retriever</td>
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<td>Boxer</td>
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<td>Border Collie</td>
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<td>Dalmation</td>
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<td>Springer Spaniel</td>
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<tr>
<td>Lurcher</td>
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Complication Rates

- **Transient skin irritation.** 3 cases required a short course of antibiotics after licking the incision line following dressing removal at 5 days post op.
- **Late meniscal cartilage tears.** In 3 cases the owners had failed to confine their dogs to strict lead exercise in the post-operative period (3 months on short lead, then 1 month on extendable lead with controlled trotting). These 3 cases went on to make excellent recoveries following partial meniscectomy via mini arthrotomy.
- **No other complications were seen in our series of 50 cases.** (NO cases of implant loosening, failure, rejection or infection).

Conclusion

At Kydd & Kydd we have been very pleased with the results of the first 50 cases treated by TTA Rapid cruciate ligament surgery. We are more than happy to continue to provide TTA Rapid procedures to referring practices. In the few cases where complications occurred, a problem was identified arising in the post-operative period when the patient was at home in the care of the owners (either licking the incision line or overactivity whilst off lead). As with any orthopaedic surgical procedure, strict adherence to the clear, written post-operative instructions which we provide is essential. (Strict lead exercise and prevent licking in the post-operative period).
TESTIMONIALS

January 2014 Golden Retriever. TTA Rapid®
“Dear Mr Kydd, We would like to thank you again so much for the wonderful care you have taken of Rodney and for the amazing skill of his operation. It is great to have him restored to full strength and mobility and we are very grateful. We will keep him on a lead for another month and then rejoice in his freedom to run and play again.”

March 2014 Domestic Short Hair.
Fractured pelvis with transient sciatic and pelvic nerve damage.
“Just to say thank you to you all for everything you have done for Lilly over the last 6 weeks. She wouldn’t have made it at all without all your care and professional help and I want you to know how much this has meant to me.”

May 2014 Staffordshire Bull Terrier. Tibial tuberosity avulsion.
"Thank you for fixing Blue! All of your expert treatment and advice has paid off and he appears to be entirely fixed in his back leg. Thank you too for guiding us through this stressful experience. You will be pleased to hear that on day 1 of Blue’s lead-off future he was awarded his Kennel Club Good Citizenship rosette…. his first day back to class! Thank you all for everything and wishing you all the very best."

May 2014 Miniature Schnauzer. Ruptured cruciate ligament and meniscal cartilage damage
“Thank you David Kydd for treating our beloved Coco so well today and saving her leg. She is happy to be home with all the family including her buddy Alfie and we all wish her a speedy recovery :))”

Pricing
Our pricing structure is “middle tier”, aiming to offer a value for money referral service. We always try to give accurate written estimates to clients in advance, on a no-obligation basis. Our pricing structure can often offer significant savings to clients, when compared to quotes for equivalent conditions and procedures in the larger referral centres. We try to avoid very expensive “major plus” surgical interventions unless these are absolutely necessary.

Many owners do not have pet health insurance for their animals. In the interests of animal welfare, we always try to offer an ethical, good quality and cost-effective orthopaedic service at very competitive fee levels.