

Fusion Implants

Advanced Veterinary Devices



ACE

THE (FELINE)
ACETABULAR PLATE

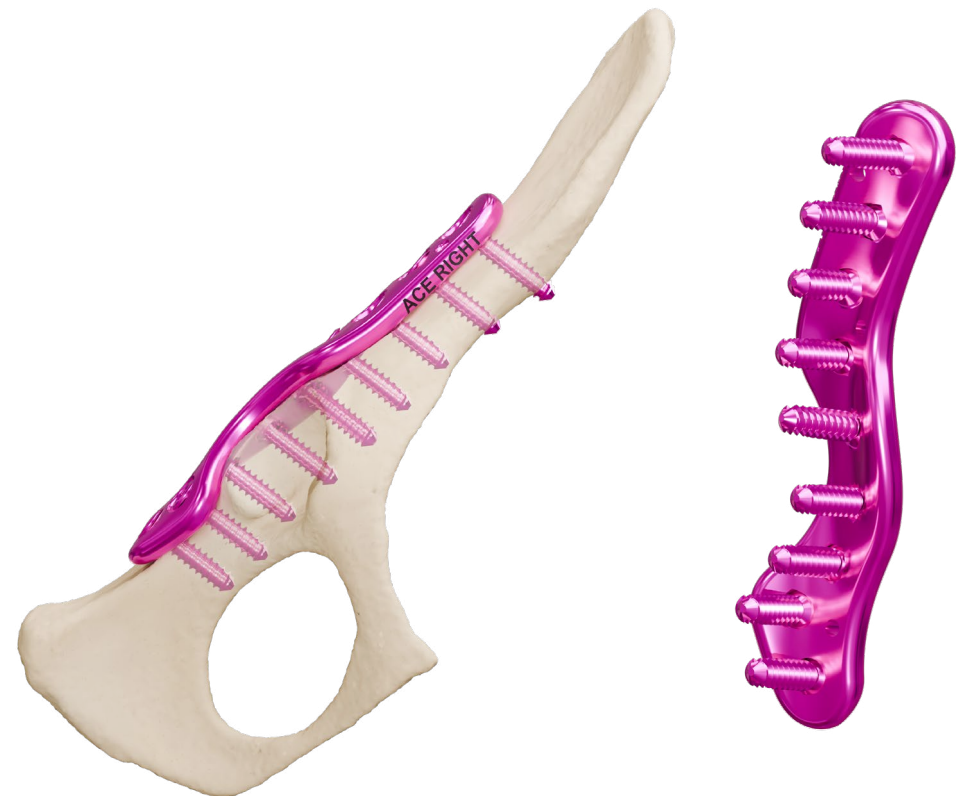
SURGICAL PROTOCOL



The (Feline) Acetabular Plate (ACE) is compatible with the 2.0 mm system, with all holes accepting 2.0 mm locking screws.

Key Design Features:

- **Extended Working Length:** Unlike typical acetabular plates, with a semi-lunar design, the ACE maximises working length across cranial and caudal fracture fragments, improving construct stability.
- **Optimised Bone Purchase:**
 - The cranial arm is designed to engage the dorsal aspect of the ilial body, where the bone is thicker and more dense.
 - Both cranial and caudal arms aim to engage dense bone stock to minimise the risk of loosening.
- **Plate Positioning Consideration:** Care must be taken to avoid ventral displacement of the cranial arm, as this will result in the caudal arm standing off the ischial bone surface.



Surgical Approach

Approach:

Standard dorsal approach to the hip joint.

In Cats:

- Gluteal tenotomy or
- Greater trochanteric osteotomy.

Soft Tissue Dissection

Skin Incision:

- Generally, a craniodorsal to caudoventral oblique incision will allow access to the greater trochanter (for osteotomy), and the ilium and ischium for plate application.

Superficial Layer:

- Incise and reflect the tensor **fasciae latae muscle** cranially.

Muscle Identification and Elevation:

- Identify the vastus lateralis muscle (originating from the proximal femur).
- Elevate its proximal fibres carefully using a periosteal elevator.
- Transect the tendon of insertion of the superficial gluteal muscle.

Greater Trochanteric Osteotomy (if performed)

- Identify the **greater trochanter**, which serves as the insertion for:
 - **Middle gluteal muscle**
 - **Deep gluteal muscle**
- Perform an osteotomy along a line approximately parallel to the femoral neck, exiting medially above the femoral neck.
- Reflect the greater trochanter proximally, maintaining attachment of the **middle and deep gluteal muscles**.
- This provides exposure to the dorsal acetabulum.

Cranial Exposure

- Expose the dorsal acetabulum and fracture site.
- Ensure adequate visualisation of the dorsal ilial body, where the cranial arm of the ACE plate will be positioned.

Caudal Exposure

This portion is more technically demanding.

Key Considerations:

- Protect the **sciatic nerve** at all times.

Muscle Handling:

- Identify the **gemelli muscles** and **internal obturator muscles** inserting in the **intertrochanteric fossa**.
- These muscles should be carefully elevated from the ischium using a freer elevator to create a pocket to accept the caudal arm of the ACE plate

Plate Placement

- Slide the ACE plate beneath the caudal musculature and position it along the dorsal acetabulum.
- **Ensure:**
 - Cranial arm sits flush along the dorsal ilial body
 - Caudal arm is appropriately seated without soft tissue interposition

Practical Tip:

Attach a locking drill guide to the plate to act as a handle for improved manipulation and positioning.

Fracture Reduction

- Reduction is typically the most challenging aspect.

Techniques:

- Use a skilled assistant.
- Consider separate small incisions for:
 - **Ischial tuberosity:** apply bone-holding forceps (e.g. Kern forceps)
 - **Dorsal iliac wing:** for additional control
- Temporary stabilisation options:
 - **Olive Pins/ Stay-Fix pins** can be applied to the ACE plate.

Tip:

- The surgeon might choose to retain responsibility for holding the fracture parts in reduction, while the assistant performs drilling and plate application.

Fixation

- Insert screws in a sequence appropriate to the fracture configuration.
- Confirm stable fixation and anatomical reduction.

Closure

- Reattach the **greater trochanter** using appropriate fixation (e.g. pins and tension band).
- Routine closure