



Coffin Bone Protrusion

A rotated coffin bone, which can result from several different causes, is a change in the position of the coffin bone. The sensitive laminae which normally hold the coffin bone firmly in place stretch, allowing the toe of the coffin bone to drop. This then presses on the sole, which causes inflammation and changes to the laminae and bone of the toe. New horn no longer grows in this region; only a secretion is produced from the effected area. Eventually, as the sole is worn away from below and the horn on the inside of the sole decays, the tip of the coffin bone protrudes through the sole.

In conventional circles, coffin bone protrusion is a death sentence.



Left above: This 20 year old gelding was presented to the Fischer Lameness Foundation—a hoof clinic in Minnesota—with severe coffin bone rotation. The attending veterinarian recommended the horse to be euthanized.

Right above and all below: The after trim x-rays on the next slide were taken four months after the first trim on the left front, and five months after on the right front. The coffin bones are now ground parallel within the hoof capsule. The horse continues to progress and is doing well.



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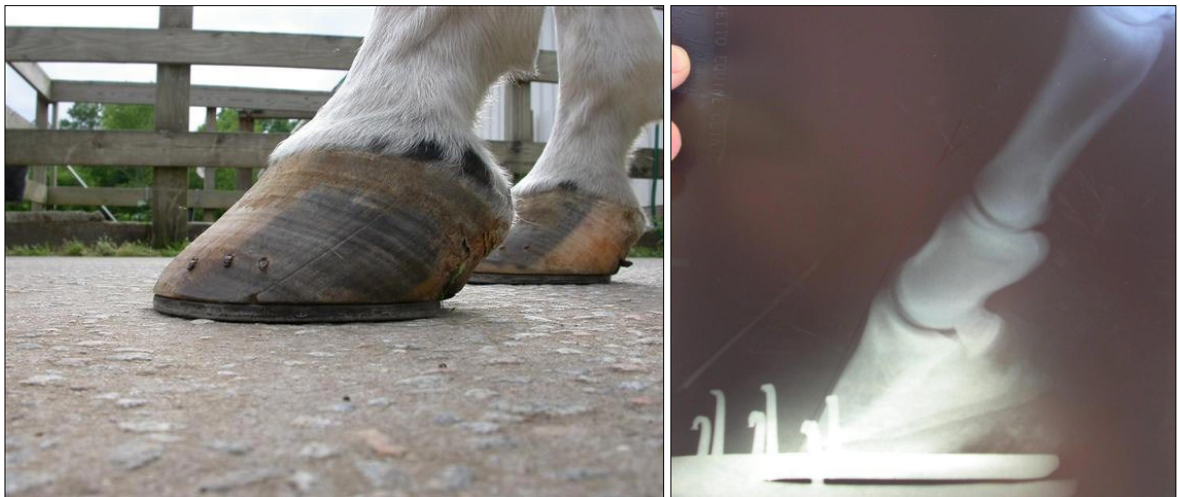


While this does look rather grim, most horses are actually feeling better, once the coffin bone has broken through the sole. The pressure on the tip of the coffin bone is gone and the pain is less.



Next picture(s): 18 year old Saddlebred gelding. Had been foundered for years and on all kind of medication, including an antihistamine for Cushing's syndrome (please don't ask why, this is the information he came with). At the time of the x-rays taken, the attending veterinarian was adamant to put him down.

He came to HoofCareUnLtd. (hoof clinic in SC) , his shoes were taken off and he was trimmed. He underwent quite some detox and metabolic troubles. After about two weeks into the treatment he crashed and didn't get up for two weeks unless he was urged by a caretaker. His coffin bones broke through the sole. He felt better after the detox and steadily improved. 8 months later he was rideable again and another 10 months later he competed in local shows.



Left front before first trim. 24° rotation and sunk coffin bone

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Right front before first trim. 28° rotation and sunk coffin bone



Protrusion has healed after 6 weeks

Protruded coffinbone. See how much separation there is, but the coffin bone is not sunk. Either this hoof had shoes on till the very end or the toe was shortened from below significantly before protrusion occurred.



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The coffinbone is just about to come through the sole



Here it actually did



Another live hoof with protrusion. While coffin bone protrusion is a serious condition, it does not need to be a death sentence.



Cadaver specimen, left side trimmed, right side before trimming. Protrusion becomes more apparent after trimming.

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Protruding coffin bones should really be treated on a rubber floor. It is imperative to bring the coffin bone into a ground parallel position in order to relieve the protruding bone. Shorten the heel and the bars accordingly.

You can soak the hoof with mild solutions of Apple Cider Vinegar or a Calendula solution, keep it clean. You may try to administer some homeopathic Arnica for the trauma and Hypericum for the nerve pain.

Support with excellent nutrition.

When trimming, take the heel as far down as you can without making the horse sore in the heel. That could be below the regular heel height.

Treat sores on the hips, elbows and lateral on the knees and hocks immediately.

In our experience a horse with such severe pathology is a full time care case.

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Pictures: Sharyl Fischer, Dr. Hiltrud Strasser, HoofCareUnLtd., Gretchen Fathauer