

## New Cervical Plating System for Improved Spinal Fixation

**R**esearchers at the University of South Florida have designed a cervical plate system to improve spinal fixation with vertebral fusion surgeries utilizing interbody cages.

The number of spinal fusion surgeries increases each year for treatment of a variety of problems from degenerative disc disease to trauma. Interbody cages are used in many spinal fusions due to the decreased morbidity in the surgery compared to other methods of fusion. Stabilization of interbody cages between vertebrae is imperative for proper fusion of the spine, and anterior cervical plating is used in these surgeries to do so. Cage movement (subsidence) and rotation, however, are still the two most common reasons for cage failure. Existing plates utilize only two inferior screws, which serve as a fulcrum for cage rotation.

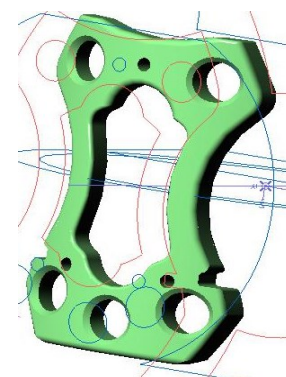
Our researchers have therefore designed a novel anti-subsidence, anti-rotation cervical plating system for vertebral fixation. While providing stability to the cervical spine as other plating systems do, our plate utilizes three locking screws in the lower (inferior) portion of the plate to reduce cage subsidence and rotation, and allows for compression of the vertebral bodies against the cage, which is required for inducing new bone growth and vertebral fusion. Anterior variable angle screws facilitate a dynamic plate. The plate also has a direct vision window to allow visualization of the interface between the vertebral end plate and the cage, a relationship that is important to monitor for proper fusion.

Because precise plate installation is required to restrict cage migration, our plating system includes a positioner for proper screw placement and drill guides for precise screw positioning.

### ADVANTAGES:

- **Designed specifically for use with an interbody cage**
- **Facilitates anti-subsidence and resists cage rotation**
- **Allows surgeons to monitor the interface between the cage and the vertebral end plate**
- **Drill guides allow installation of screws at precise angles and positions**
- **Allows proper installation of the plate for efficient vertebral fusion**

*Improves the Outcome of Spinal Fusion Procedures*



*Cervical Plate*

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