Reviewer's comment concerning "Anterior cervical pedicle screw and plate fixation using fluoroscope-assisted pedicle axis view imaging: a preliminary report of a new cervical reconstruction technique" by Y. Yukawa et al.: DOI:10.1007/s00586-009-0949-1

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Methods for the stabilization of the cervical spine improved enormously in the last two decades as also improved all other spinal fixations. This was possible on one side through the technology and the development of better screw fixation systems having stronger bone purchase and angle stable linkage despite variable insertion angles. On the other side, the recognition of the pedicle as the strongest element for screw anchorage has been demonstrated also in the cervical spine. All these improved implants combined with interbody or reconstruction cages having different size and shape have allowed always more complex cervical spine reconstruction surgeries.

In this article the authors report on a new fixation technique of the cervical spine where pedicle screw anchorage is performed through an anterior approach.

Screw insertion into the pedicles is performed using fluoroscopy guided technique. Cervical spine stabilization consists in an unilateral plate/screw system.

This study demonstrates the technique is feasible when performed by extremely skilled surgeons. Major neurological complications with screw misplacement are evident and could be partially reduced using computer-assisted navigation system. Due to these dangers, the indications for this technique must remain extremely limited to those very rare cases where the traditional anterior or/and posterior stabilization systems cannot be applied and to those spine centers with sufficient experience in complex cervical spine reconstruction surgery.

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