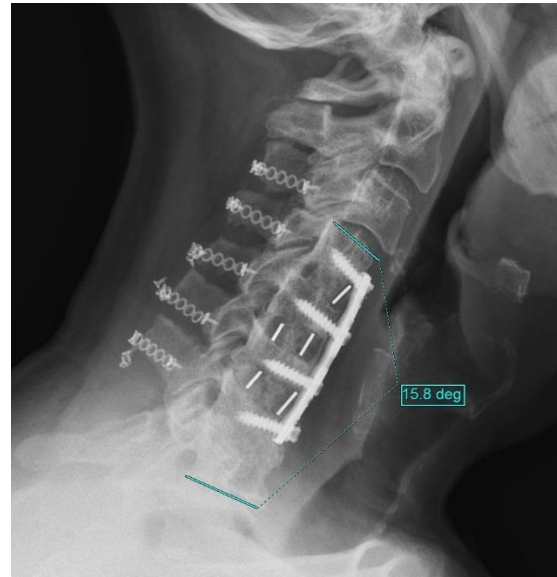
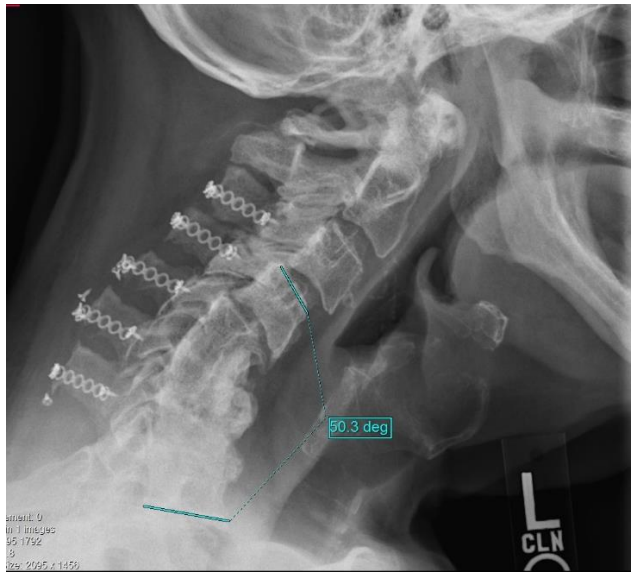


Case A. History: 66 year old male. 3 prior surgeries of cervical spine performed by another surgeon. Presented with severe kyphosis and failed laminoplasty (note “free floating” screws on left image). Symptoms (neck pain, occipital headaches, left arm pain, numbness/tingling) progressed slowly over 4 years prior to initial Dr. Buttermann evaluation despite physical therapy, injections.

Treatment: 2018: Multi-level anterior osteotomies and C4-7 ACDF



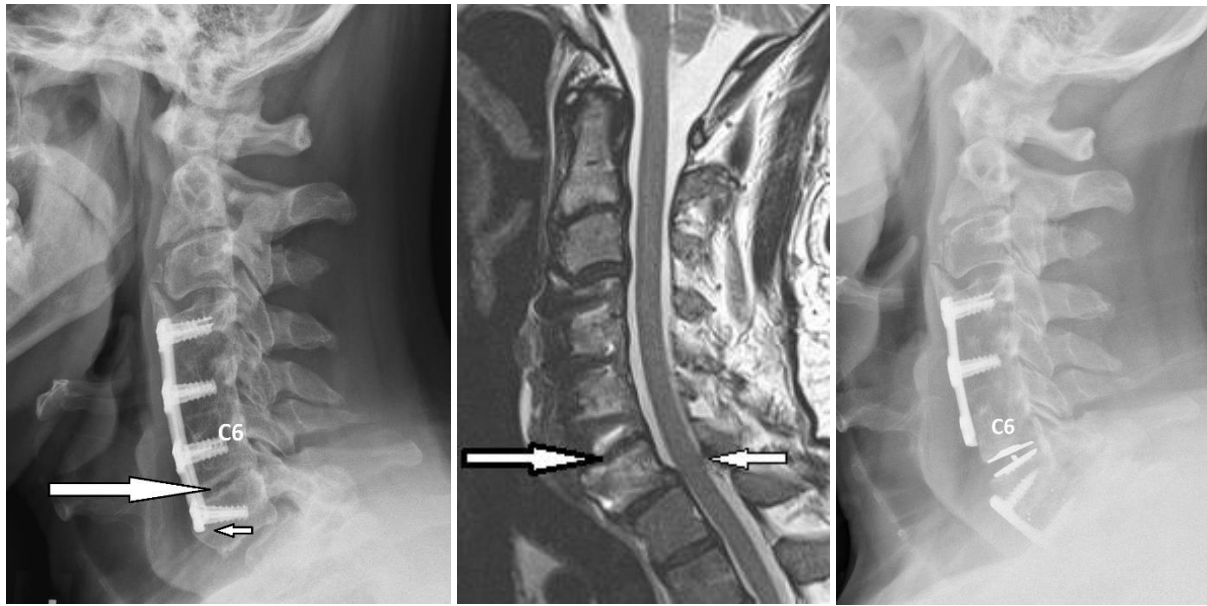
Outcomes at 2 years: All improved

Pre-operative: 8/10 neck VAS pain, 4/10 arm VAS pain, 42 NDI

Post-operative: 0.0 neck VAS pain, 1.5 arm VAS pain, 20 NDI

Case B. History: 50 year old male 9 years s/p prior C4-7 ACDF performed by another surgeon. He presented to Dr. Buttermann with symptoms of slowly progressive neck pain, bilateral arm pain with numbness/tingling, and weakness over 3 years despite physical therapy. Evaluation identified a pseudarthrosis at C67 (large arrow) and a C7-T1 spondylolisthesis with stenosis (small arrow) affecting the spinal cord and C8 nerve roots.

Treatment: 2017: Removal of old plate and osteotomy at C6-7, followed by conversion to TDR. C7-T1 ACDF.



Outcomes at 3 years: All improved

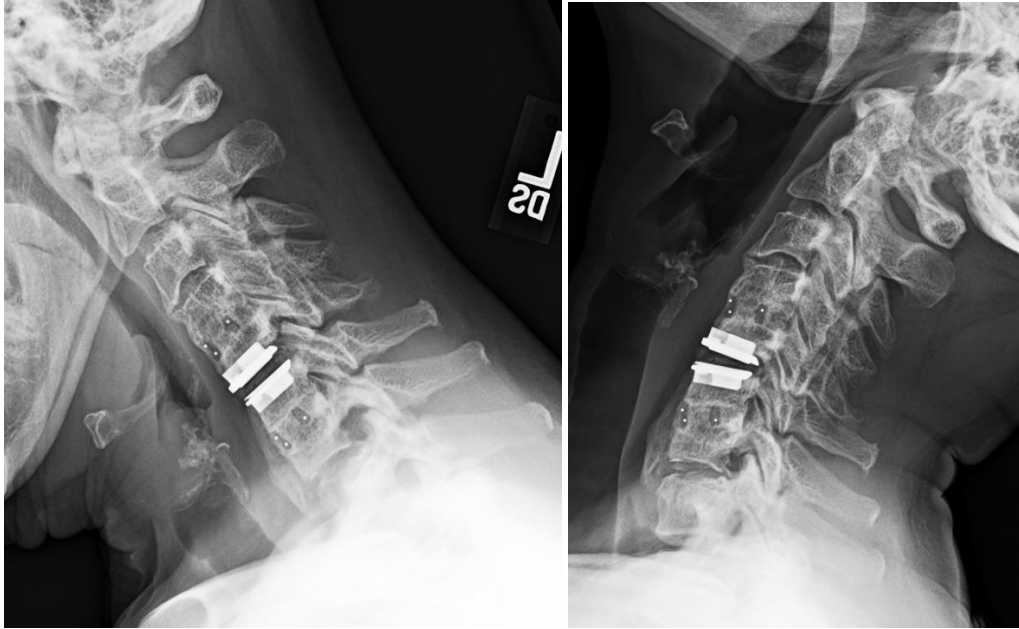
Pre-operative: 8/10 neck VAS pain, 4/10 arm VAS pain, 42 NDI

Post-operative: 0.0 neck VAS pain, 1.5 arm VAS pain, 20 NDI

Case B. History: 59 year old female 1 year s/p prior C4-7 ACDF performed by another surgeon. She presented to Dr. Buttermann with symptoms of progressive disabling neck pain, despite physical therapy and interventional treatments. Evaluation identified a pseudarthrosis at C5-6 (see change in distance, yellow arrows, between C5 and C6 spinous processes with flexion and extension x-rays; this should not change if fusion solid).

Treatment: 2018: Removal of old C4-7 plate, followed by conversion of C5-6 pseudarthrosis to TDR.





Outcomes at 2 years: All improved

Pre-operative: 9/10 neck VAS pain, 60 NDI

Post-operative: 2.5 neck VAS pain, 20 NDI