

## SPINE CASE SERIES: OCCIPITOCERVICAL FIXATION

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**Introduction:** Dealing with higher cervical pathology such as trauma, malignancy or infection has never been easy. Craniocervical joint fixation is challenging as it has numerous vital structures surrounding it thus need expert surgical skill. We are reporting a series of craniocervical or occipitocervical fixation (OCF) cases which were done in our centre.

**Discussion:** 4 OCF cases of different pathology were identified since year 2019 until present that were performed by the same surgeon. Case 1: 59 years old gentleman was with C1/C2 subluxation with stenosis following avascular necrosis of odontoid process causing both upper and lower limb acute weakness. OCF of C0-C3 made in December 2020. 1 month post operation, strength and sensation of both upper and lower limbs restored to normal bilaterally. Case 2: 36 years old female with stage IV breast carcinoma. Despite of several life threatening occasions, she managed to survive multiple major operations in January 2021 including interlocking nail and cement insertion of right femur, resection of proximal left femur and endoprosthesis insertion, and OCF of C0-C4. Postoperatively, she is recovering without neurological deficit. Case 3: 50 years old age female diagnosed with stage IV lung adenocarcinoma. Postoperatively, her neurology function remained similar to that of preoperatively. Case 4: 22 years of age female with Down's Syndrome referred to our centre with atlantoaxial instability and type I odontoid fracture. She had done OCF C0-C5 in April 2019 after she developed tetraplegia. At present neurology has much improved with almost full strength. Despite of meticulous and technically demanding operation, 3 out of 4 the cases (75%) yielded neurological improvement, whereas 1 case (25%) reported to be having neurological status quo. Surgical site of infection is one of complications that must be anticipated.

**Conclusion:** With regard the favourable outcomes, OCF can be considered successful in our setting.