

## Enlarged anterior cervical discectomy and fusion in the treatment of severe localized ossification of the posterior longitudinal ligament

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**Background :** Severe localised ossification of the posterior longitudinal ligament (OPLL) should be directly removed by anterior approach, but the exposure during anterior cervical discectomy and fusion (ACDF) is restricted and may increase the risk of a cerebrospinal fluid (CSF) leak. Corpectomy is facilitated to extirpate the ossification, but it is relatively more invasive. The purpose of this demonstration was to investigate the feasibility and clinical outcome of enlarged ACDF in treating severe localised OPLL.

**Methods :** Two selective patients with severe localised OPLL who underwent enlarged ACDF from January 2018 to Jan 2019 were demonstrated. A technical demonstration through surgical video and complications are featured through this presentation.

**Results :** Both patients suffered from transient affected side C5 palsy (2-3months) as well as prevertebral swelling due to temporary CSF leakage. However, consequent radiological result demonstrated through postoperative MRI as well as clinical/neurological consequence were well-improved as noted on the final follow-up.

**Conclusions :** Enlarged ACDF is an effective procedure for treating selective patients with severe localised OPLL. Using this technique, the retrovertebral OPLL can be removed through a one-level discectomy and a corpectomy can be avoided.