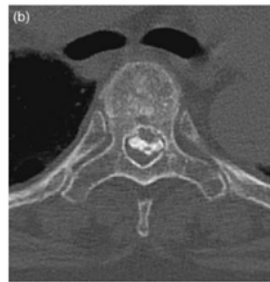


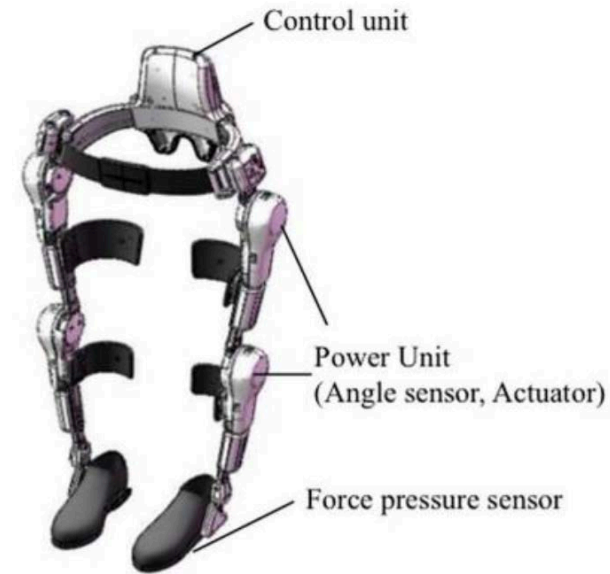
The voluntary driven exoskeleton Hybrid Assistive Limb (HAL) for postoperative training of thoracic ossification of the posterior longitudinal ligament: a case report



Pre-op CT scan, sagittal (a) and axial (b)



Post-op X-ray (AP)



The hybrid assistive limb (HAL). The HAL has power units on the hip and knee joints on both sides; the power units consist of angular sensors.

Table 2 The results of the cervical JOA score excluding upper extremity, ASIA classification, ASIA motor score (lower extremity), ASIA sensory score (lower extremity), SCIM-score, WISCI II score, and Frankel classification at pre-op and at discharge

	Cervical JOA score excluding upper extremity	ASIA classification	ASIA motor score (lower extremity)	ASIA sensory score (lower extremity)	SCIM-score	*WISCI II	Frankel classification
Pre-op	5.5/11	D	18/15	43/43	57	8	C
At discharge	6.5/11	D	19/19	43/43	84	16	D

*WISCI II: Walking Index for Spinal Cord Injury II

We concluded that HAL training for postoperative thoracic OPLL patients may enhance improvement in walking ability.