

Supplementary Table: summary of three extra case series of CM-I patients with syringobulbia.

Author(s), Year	Old	Sex	Manifestations	Examination Findings	Extent of SB	Extent of SM	Operation	Outcome	Follow-Up
Menezes, A. H., 2018	12	F	Limb weakness, diplopia, snoring	CN VI, IX, X, XII palsies, Hyperreflexia, ptosis,	Medulla-pons, midbrain, no V4 connection	Holocord	Gliotic tonsils, veil over FM	Resolved except tongue fascic	20 yrs
	12	F	Headache, diplopia, limb weakness	Nystagmus, dysesthesia, hemiparesis, hyperreflexia	Medulla	Holocord	Transoral decompration, PFD	Resolved	4 yrs
	14	F	Poor coordination; headache, dysphagia	Nystagmus; spastic throughout; CN IX & X palsies	Medulla (left)	Cervical	Transoral decompration, PFD; veil over FM	Persistent hyperreflexia	12 yrs
	15	F	Headache, dysphagia, ataxia, numbness	CN V, IX, X palsies	Age 1 yr: none Age 15 yrs: medulla	cervicothoracic	PFD, VP-shunt, Transoral decompression medulla, gliosis, FM closed	Mild ataxia	15 yrs
	17	M	Headache, sleep apnea, arm pain & numbness	CN V, IX, X palsies, arm dyesthesia, thoracic scoliosis	Medulla (left)	Holocord	SB opened into floor of V4	Resolved	13 yrs
	17	M	Sleep apnea, kyphoscoliosis, face numb, ptosis	Horner's syndrome, CN V, IX, & X palsy	Medulla	Holocord	Veil occluding V4	Resolved	20yrs
	11	F	headache; neck pain; incoordination; diplopia	Ataxia, CN IX & X palsies; hyperreflexia	Medulla	Cervical	Entire (rt) tonsil in V4	Resolved	18yrs
	16	F	Headache, scoliosis	Ataxia, CN IX & X palsies, dyesthesia, hyporeflexia	Medulla (left)	Holocord, side tract in medulla to V4	Tonsils in V4; veil over FM	Improved	12yrs
	18	M	Arm pain	CN IX & X palsies	Medulla; no V4 connection	Holocord	Right tonsil filled V4	Resolved	4 yrs
	15	M	Limb weakness and dyesthesia, headache	Horner's syndrome, hyperreflexia	Whole brain stem, syringocephaly	Holocord	Severe scar over FM	Improved	4yrs

18	M	Sleep apnea; headache; neck pain; dysphagia dysarthria	Nystagmus, CN IX & X palsies, horner's syndrome, tough fasciculation; palatal myoclonus	Medulla (left), ventrally	Holocord	Rt tonsil filled V4; veil over FM	Improved	6yrs
14	F	Headache, diplopia; scoliosis; incoordination	CN IX & X palsies; nystagmus; scoliosis; hyperreflexia,	Medulla	Cervical	Veil over foramen magnum; PFD and O-C2 fusion	Resolved	3yrs
16	M	Headache, dysphagia	CN IX & X palsies; hyperreflexia, dysesthesia	VP shunt	holocord	VP shunt	Improved	1yr
Greenlee, J., 2005	12	F	Diplopia, snoring	L VI, IX, X, XII palsies; ptosis; hand intrinsic weakness; foot drop; hyperreflexia	Medulla-inferior pons	Holochord	Posterior fossa decompression, C-1 laminectomy, and duraplasty	Tongue fasciculations otherwise normal
	12	F	Diplopia, headache	Mild hemiparesis; nystagmus; hyperreflexia; C2 hypesthesia	Medulla	Holochord	Posterior fossa decompression, C-1 laminectomy, and duraplasty	Hyperreflexic lower extremities
	14	F	Gait instability, incoordination	Nystagmus; hyperreflexia	Medulla	Cervica	Posterior fossa decompression, C-1 laminectomy, and duraplasty	Hyperreflexic 1.8
15	F	Head and neck pain, dysphagia, hand paresthesia, snoring	L IX, X palsies; hyperreflexia; hand weakness	Medulla	Cervical	Posterior fossa decompression, C-1 laminectomy, and duraplasty	Normal 3.5	
17	M	"Eyes bouncing," arm paresthesias, snoring, sleep apnea	CN V palsy; upper extremity hypesthesia; hyperreflexia; thoracic scoliosis	Medulla	Holochord	Posterior fossa decompression, C-1 laminectomy, and duraplasty	Normal 3.2	
17	M	Numbness L face, eye droop, snoring	Ptosis, enophthalmos; face, limb hypesthesia, hypalgesia; hyporeflexia; scoliosis	Medulla	Holochord	Posterior fossa decompression, C-1 laminectomy, and duraplasty	Improved 4.1	
Botelho, R.,	38	F	Left hemiparesthesia	Left hemiparesthesia suspended	None	cervicothoracic(C1-T8)	None	-

2000			anesthesia T4-T8					
	39	F	Spastic tetraparesis, atrophy of the hands, snoring	Suspended dissociated anesthesia C6-T1	None	cervicothoracic(C2-T6)	None	None
	34	F	Cerebellar ataxia, dysphagia, snoring	Cerebellar ataxia, Dysphagia	None	None	None	-
	45	M	Vertigo, snoring	Nystagmus	None	cervicothoracic(C2-T4)	None	None
	54	M	Brachial paresis, snoring	Hemipalatoparesis, dysphagia	None	Cervical	None	None
	42	F	Sensory disturbance, snoring	Right arm paresthesia and paresis, left leg paresis, right arm hypoesthesia	None	None	None	-
	31	F	Atrophy of the hands, Snoring	Fasciculation of the hands, painful anesthesia in the lower limbs, sensitive dissociation between T1-T6	None	cervicothoracic(C3-T6)	None	-
	50	M	Spastic tetraparesis, Snoring	Fasciculation of the upper limbs, neck, and tongue	None	None	None	-
	34	F	Atrophy of the left hand, burning hands, snoring	Burning hands, left-hand atrophy	None	cervicothoracic(C1-T6)	None	-
	70	F	Complete left paresis, snoring	Complete left paresis	None	None	None	-
	59	M	Anakusis, facial paresis, spastic tetraparesis, snoring	Anakusis, facial paresis, spastic tetraparesis	None	None	None	-

C: cervical, CN: cranial nerve, ETV: endoscopic third ventriculostomy, F: female, FMD: foramen magnum decompression, ICP: intracranial pressure, M: male, m: month(s), O: occipital, PDF: posterior foramen decompression, SB: syringobulbia, SM: syringomyelia, T: thoracic, yr(s): year(s), VP: ventriculo-peritoneal.