

Table S1: Laryngeal Dystonia-Associated Genes

Symbol	Gene	Locus	Mode of inheritance	No. patients	Current age /Age of onset (years)	Sex (M/F)	Laryngeal dystonia (adductor/abductor)	Clinical presentation	Literature
DYT1	TOR1A	9q34	AD	2	48/39	F	adductor	cervical dystonia, spasmodic dysphonia (SD) and writer's cramp	Xiao <i>et al.</i> [22]
					63/19	F	adductor	SD, upper extremity action tremor	
DYT4	TUBB4A	19p13	AD	9	30-65 range /24.1 ± 7.7	5F/4M	adductor	generalized dystonia, upper limb tremor even after bilateral ventrolateral nuclei thalamotomy; subtle swallowing problems; gait dystonia	Wilcox <i>et al.</i> [23]
				2	31/20	F	adductor	whispering voice and eyelid ptosis; later on severe dysphagia requiring supplemental feeding through a percutaneous endoscopic gastrostomy (PEG) tube; "hobby horse" type gait	Lohmann <i>et al.</i> [24]
					71/60	F	adductor	SD, oromandibular dystonia and Dyskinesia	

DYT6	THAP1	8p11	AD	2	35/9	M	*not specified	severe LD, speech problems followed by writer's dystonia, dysarthria	Djarmati <i>et al.</i> [25]
					68/10	M	*not specified	writer's dystonia followed by LD	
				6	58/51	F	adductor		Xiao <i>et al.</i> [26]
					66/62	F	adductor		
					63/62	F	adductor		
					85/33	F	adductor	segmental craniocervical dystonia that included LD, blepharospasm, and lower facial dystonia	
					62/48	F	adductor		
					75/66	F	adductor		
				1	35/14	F	adductor	spasmodic dysphonia that spread to the oromandibular region	Groen <i>et al.</i> [27]
				2	NA/14	F	adductor	SD with cervical and oromandibular spread	Groen <i>et al.</i> [28]
					35/14	F	adductor	SD that spread to the oromandibular region, tongue dystonia	

				3	24/8	M	abductor	right arm dystonia and bilateral upper extremity dystonic tremors; mild cervical, lower facial, lingual, and masticatory dystonia	LeDoux <i>et al.</i> [29]
					44/6	M	abductor	SD, blepharospasm, masticatory dystonia, lower facial dystonia, lingual dystonia, bilateral proximal arm dystonia (left > right), bilateral distal arm dystonia (right > left), truncal dystonia, and mild asymmetrical dystonia in the legs and feet	
					47/40	M	abductor	LD and bilateral dystonic arm tremors, blepharospasm and lower facial, lingual and masticatory dystonia	
				2	70/24	M	*not specified	SD	de Gusmão <i>et al.</i> [30]
					NA/50	F	*not specified	focal SD	
DYT11	SGCE	7q21	AD	1	66/40	M	*not specified	writer's cramp, myoclonus dystonia	Kumar <i>et al.</i> [31]
				1	24/4	M	*not specified	myoclonus dystonia with SD	Gultekin <i>et al.</i> [32]

DYT16	PRKRA	2q31	AR	4	35/12	M	*not specified	oromandibular dystonia, laterocollis, and upper limb dystonia, present parkinsonism	Camargos <i>et al.</i> [33]
					19/2	M	*not specified	generalised dystonia characterised by involvement of legs, hands, trunk, and voice, severe bradykinesia but no tremor	
					64/18	M	*not specified	laterocollis, right laterotrunk, SD, extension of the left leg when walking, slight bradykinesia, present parkinsonism	
					48/2	F	*not specified	combination of lower volume and strangled character suggestive of a mixed form of SD, bradykinesia, present parkinsonism	
				1	35/13	M	adductor	SD, oromandibular dystonia, and dystonic protrusion of the tongue, parkinsonism	Camargos <i>et al.</i> [34]
				1	40/39	F	*not specified	LD	Zech <i>et al.</i> [35]
				2	43/8	M	*not specified	SD, parkinsonism	Quadri <i>et al.</i> [36]
					38/4	M	*not specified	dystonia of the oromandibular region (reduced by a sensory trick - a light touch on the chin), the neck	

(laterocollis and antecollis), and both upper limbs and right foot, parkinsonism									
DYT24	ANO3	11p14	AD	1	NA/NA	F	*not specified	cervical, laryngeal, and upper-limb tremulous dystonia	Charlesworth <i>et al.</i> [37]
				7	39/5	F	*not specified	LD and mild oromandibular dystonia, blepharospasm and torticollis, head tremor	Stamelou <i>et al.</i> [38]
					31/6	F	adductor	essential tremor	
					deceased/27	F	adductor	torticollis, head tremor	
					67/40	M	adductor	torticollis to the right, blepharospasm, head tremor	
					69/30	M	adductor	torticollis, blepharospasm, oromandibular, head tremor	
					deceased/30	F	adductor	torticollis, head tremor	
					36/19	F	adductor	torticollis, head tremor	

DYT25	<i>GNAL</i>	18p11	AD	1	37/36	M	adductor	LD	Putzel <i>et al.</i> [39]
				1	42/32	F	*not specified	difficulty pronouncing vowels, neck dystonia, blepharospasm and writer's cramp	Kumar <i>et al.</i> [31]
DYT27	<i>COL6A3</i>	2q37	AR	2	51/20	M	*not specified	tremulous cervical dystonia; upper limb dystonia with dystonic action and postural tremor; writer's cramp; oromandibular dystonia; LD; trunk dystonia	Zech <i>et al.</i> [40]
					48/20	F	*not specified	tremulous cervical dystonia; upper limb dystonia with dystonic action and postural tremor; writer's cramp; oromandibular dystonia; LD	
[2DYT 28]	<i>KMT2B</i>	19q13	AD	19	6-46/2-23	10F/9M	*not specified		Meyer <i>et al.</i> [41]

1	28/6	M	*not specified	oromandibular-laryngeal involvement and atypical gait dystonia (<i>Charlot gait</i>)	Brás <i>et al.</i> [42]
11	10-52/3-13	7F/4M	abductor /adductor type	progressing to scarcely intelligible speech or even complete anarthria in 4 patients, oromandibular dystonia, parkinsonism	Carecchio <i>et al.</i> [43]
32	3-44/3-19	18F/14M	*not specified		Cif <i>et al.</i> [44]
1	23/5	M	*not specified	LD, generalized dystonia with a tremulous and twisting pattern	Kumar <i>et al.</i> [31]

AD, autosomal dominant; AR, autosomal recessive; SD, spasmodic dysphonia; LD, laryngeal dystonia; NA, not available; not specified, the authors did not specify what type of dystonia is, the adductor or abductor type

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