

TableS1: Baseline demographic status and comorbidity compared between SRMD and comparison groups among aged <45

Variable	SRMD cohort N = 216 (%)	Comparison cohort N = 864 (%)	<i>p</i> -value
Sex			0.999
Female	106 (49.07)	424 (49.07)	
Male	110 (50.93)	440 (50.63)	
Comorbidity			
Hypertension	12 (5.56)	49 (5.67)	0.947
DM	10 (4.63)	40 (4.63)	0.999
IHD	5 (2.31)	19 (2.20)	0.918
Hyperlipidemia	8 (3.70)	34 (3.94)	0.875
AF	0 (0)	0 (0)	-
OSA	2 (0.93)	10 (1.16)	0.772

Abbreviation: SRMD: sleep-related movement disorders; DM: diabetes mellitus; IHD: ischemic heart disease; AF: atrial fibrillation; OSA: obstructive sleep apnea

TableS2: Baseline demographic status and comorbidity among PLMD and RLS groups of patients aged <45

Variable	PLMD N = 172 (%)	RLS N = 44 (%)	p-value
Sex			0.616
Female	86 (50.00)	20 (45.45)	
Male	86 (50.00)	24 (54.55)	
Comorbidity			
Hypertension	9 (5.23)	3 (6.82)	0.917
DM	8 (4.65)	2 (4.55)	0.995
IHD	4 (2.33)	1 (2.27)	0.997
Hyperlipidemia	6 (3.49)	2 (4.55)	0.946
AF	0 (0)	0 (0)	-
OSA	2 (1.16)	0 (0)	<0.001

Abbreviation: PLMD: periodic limb movement disorder; RLS: restless legs syndrome; DM: diabetes mellitus; IHD: ischemic heart disease; AF: atrial fibrillation; OSA: obstructive sleep apnea

TableS3: Incidence of stroke and stroke subtype and multivariate Cox proportional hazards regression analysis measured hazard ratio for study cohort among aged <45 by various time intervals

Variable	SRMD cohort			Comparison cohort			Crude HR (95% CI)	Adjusted HR (95% CI)
	Event	PYs	Rate	Event	PYs	Rate		
Follow <1 yr								
All stroke	10	70	1,428.57	3	82	365.85	3.90 (3.07-4.74) ^{***}	3.04 (2.25-4.50) ^{***}
Hemorrhagic stroke	2	70	285.71	1	82	121.95	2.34 (1.95-2.74) ^{**}	2.01 (1.07-3.22) [*]
Ischemic stroke	8	70	1,142.86	2	82	243.90	4.69 (3.94-5.01) ^{**}	3.26 (2.11-4.86) ^{**}
Follow ≥1, <2 yrs								
All stroke	6	88	681.82	2	106	188.68	3.61 (3.04-4.19) ^{**}	2.89 (2.07-3.68) ^{**}
Hemorrhagic stroke	3	88	340.91	1	106	94.34	3.61 (3.20-4.02) ^{**}	2.89 (2.14-3.08) ^{**}
Ischemic stroke	3	88	340.91	1	106	94.34	3.61 (3.20-4.02) ^{**}	2.89 (2.14-3.08) ^{**}
Follow ≥2 yrs								
All stroke	5	772	64.77	4	3,491	11.46	5.65 (5.48-5.82) ^{***}	4.79 (3.14-5.51) ^{***}
Hemorrhagic stroke	2	772	25.91	1	3,491	2.86	9.04 (8.94-9.15) ^{**}	6.31 (4.56-8.89) ^{**}
Ischemic stroke	3	772	38.86	3	3,491	8.59	4.52 (4.39-4.66) ^{**}	3.28 (2.10-4.35) ^{**}

Model adjusted for age, sex, hypertension, DM, IHD, hyperlipidemia, AF, OSA

Abbreviation: PYs: person-years; Rate: incidence rate, per 1,000 person-years; SRMD: sleep-related movement disorders; DM: diabetes mellitus; IHD: ischemic heart disease; AF: atrial fibrillation; OSA: obstructive sleep apnea

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$