

Table 1 Characteristics of patients with TSCI from 2016 to 2021.

Years	2016	2017	2018	2019	2020	2021	Total
0-20	1 (0.21%)	3 (0.64%)	5 (1.07%)	5 (1.07)	7 (1.51%)	6 (1.29%)	27 (5.83%)
20-29	7 (1.51%)	5 (1.05%)	7 (1.51%)	19 (4.10)	22 (4.75%)	20 (4.31%)	80 (17.27%)
30-39	23 (4.96%)	27 (5.83%)	21 (4.53%)	35 (7.55%)	34 (7.34%)	42 (9.07%)	182 (39.30%)
40-49	13 (2.80%)	13 (2.80%)	10 (2.15%)	16 (3.45%)	13 (2.80%)	16 (3.45%)	81 (17.49%)
50-59	8 (1.72%)	10 (2.15%)	8 (1.72%)	6 (1.29%)	10 (2.15%)	6 (1.29%)	48 (10.36%)
≥ 60	8 (1.72%)	11 (2.73%)	4 (0.86%)	6 (1.29%)	7 (1.51%)	9 (1.94%)	45 (9.71%)
Gender							
Male	49 (10.58%)	54 (11.66%)	41 (8.85%)	67 (14.47%)	68 (14.68)	70 (12.43%)	349 (75.37%)
Female	10 (2.15%)	16 (4.45%)	14 (3.02%)	20 (4.31%)	25 (5.39%)	29 (6.26%)	114 (24.62%)
Occupation							
Farmer	11 (2.37%)	8 (1.72%)	9 (1.94%)	18 (3.88%)	13 (2.80%)	17 (3.67%)	86 (18.57%)
Worker	22 (4.75%)	19 (4.10%)	15 (3.23%)	24 (5.18%)	29 (6.26%)	33 (7.12%)	142 (30.66%)
Government- offices	6 (1.29%)	10 (2.15%)	8 (1.72%)	14 (2.48%)	14 (3.02%)	16 (3.45%)	68 (14.68%)
Retired	5 (1.07%)	6 (1.29%)	4 (0.86%)	4 (0.86%)	5 (1.07%)	5 (1.07%)	29 (6.26%)
Students	2 (0.43%)	1 (0.21%)	4 (0.86%)	10 (2.15%)	9 (1.94%)	7 (1.51%)	33 (7.12%)
Others*	13 (2.80%)	26 (5.61%)	15 (3.23%)	17 (3.67%)	23 (4.96%)	21 (4.53%)	115 (24.83%)
Etiology							
Traffic accidents	22 (4.75%)	24 (5.18%)	24 (4.18%)	41(8.85%)	42 (9.07%)	47 (10.15%)	178 (38.44%)
Low fall	10 (2.15%)	9 (1.94%)	12 (2.59%)	13 (2.80%)	24 (5.18%)	21 (4.53%)	89 (19.22%)
High fall	12 (2.59%)	16 (3.45%)	4 (0.86%)	12 (2.59%)	7 (1.21%)	10 (2.15%)	61 (13.17%)
Falling objects	7 (1.51%)	8 (1.72%)	7 (1.51%)	9 (1.94%)	4 (0.86%)	3 (0.64%)	38 (8.20%)
Machinery- injury	6 (1.29%)	10 (2.15%)	5 (1.07%)	6 (1.29%)	12 (2.59%)	13 (2.80%)	52 (11.23%)
Sport	2 (0.43%)	3 (0.64%)	3 (0.64%)	6 (1.29%)	4 (0.86%)	5 (1.07%)	23 (4.96%)
Marital status							
Married	41 (8.85%)	51 (11.01%)	31 (6.69%)	56 (12.09%)	62 (13.39%)	73 (15.76%)	314 (67.81%)
Unmarried	13 (2.80%)	9 (1.94%)	15 (3.23%)	21 (4.53%)	21 (4.53%)	19 (4.10%)	98 (21.16%)
Divorced	1 (0.21%)	8 (1.72%)	6 (1.29%)	8 (1.72%)	6 (1.29%)	4 (0.86%)	33 (7.12%)
Widowed	4 (0.86%)	1(0.21%)	3 (0.64%)	2 (0.43%)	4 (0.86%)	3 (0.64%)	17 (3.67%)
Ethic groups							
Han	54 (11.66%)	61 (13.17%)	43 (9.28%)	81 (17.49%)	88 (19.0%)	90 (19.43%)	417 (90.1%)
Zhuang	1 (0.21%)	4 (0.86%)	4 (0.86%)	2 (0.43%)	1 (0.21%)	4 (0.86%)	16 (3.2%)
Miao	2 (0.43%)	3 (0.64%)	4 (0.86%)	2 (0.43%)	1 (0.21%)	4 (0.86%)	16 (3.6%)
Tujia	2 (0.43%)	1 (0.21%)	3 (0.64%)	1 (0.21%)	2 (0.43%)	5 (1.07%)	14 (3.1%)

Other* included unemployed individuals and self-employed individuals

Table 2 Analysis of the etiologies and age distribution among patients with TSCI from 2016 to 2021.

Etiologies	Age					
	0-20	20-29	30-39	40-49	50-59	≥ 60
Traffic accident	8 (1,72%)	30 (6.47%)	77 (16.63%)	41 (8.85%)	27 (5.83%)	17 (3.67%)
Low fall	8 (1.72%)	16 (3.45%)	23 (4.96%)	12 (2.59%)	7 (1.51%)	23 (3.45%)
High fall	2 (0.43%)	12 (2.59%)	28 (6.04%)	14 (3.02%)	4 (0.86%)	1 (0.21%)
Falling objects	1 (0.21%)	5 (1.07%)	22 (4.75%)	4 (0.86%)	3 (0.64%)	3 (0.64%)
Machinery- injury	1 (0.21%)	14 (3.02%)	22 (4.75%)	10 (2.15%)	4 (0.86%)	1 (0.21%)
Sport	7 (1.51%)	3 (0.64%)	10 (2.15%)	0 (0)	3 (0.64%)	0 (0)

Table 3 Comparison of the degrees and segments of the injury among patients with TSCI

ASIA scale	The level of injury			
	Cervical Cord (%)	Thoracic Cord (%)	Lumbar Cord (%)	Sacral Cord (%)
A	86 (18.57%)	42 (9.07%)	28 (6.04%)	1 (0.21%)
B	55 (11.87%)	62 (13.39%)	43 (9.28%)	5 (1.07%)
C	35 (7.55%)	26 (5.61%)	21 (4.53%)	18 (3.88%)
D	15 (3.23%)	16 (3.45%)	7 (1.51%)	3 (0.64%)

Table 4 Analysis of the causes and degrees of injury among patients with TSCI

Etiologies	ASIA scale			
	A (%)	B (%)	C (%)	D (%)
Traffic accident	54 (11.66%)	78 (16.84%)	46 (9.93%)	22 (4.75%)
Low fall	13 (2.80%)	45 (9.71%)	21 (4.53%)	10 (2.15%)
High fall	29 (6.26%)	24 (5.18%)	5 (1.07%)	3 (0.64%)
Falling objects	6 (1.29%)	21 (4.53%)	8 (1.72%)	3 (0.64%)
Machinery- injury	20 (4.31%)	19 (4.10%)	11 (2.37%)	2 (0.43%)
Sport	4 (0.86%)	9 (1.94%)	9 (1.94%)	1 (0.21)

Table 5 Clinical complications associated with injuries during the hospitalization period among patients with TSCI

Complications	Numbers (%)
Pulmonary infection	65 (14.0%)
Hyponatremia	39 (8.3%)
Bedsore	37 (8.0%)
Urinary tract infection	(72, 15.6%)
Deep venous thrombosis	11 (2,4%)
Others*	11(2.4%)
Associated injuries	
Craniocerebral injury	49 (10.6%)
Limb fractures	83(17.9%)
Pelvic fractures	64(13.8%)
Ribs fractures	74(16.0%)
Other**	41(8.9%)
No	152(32.8%)

Others* include cardiovascular diseases and digestive system disease

Others **lung contusion, hemopneumothorax

Table 5 The treatment options for persons with TSCI

Treatment options	Numbers (%)
Rehabilitation therapy	101 (21.8%)
Traditional therapy	52 (11.2%)
Hyperbaric oxygen therapy	20 (4.3%)
Assistive devices	15 (3.2%)
Medicine	15 (3.2%)