Effects of Pre-hospital Emergency Guided by MPDS on the Treatment and Prognosis of Stroke Patients

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Objective

To study the pre-hospital emergency system guided by MPDS and its effects on improving the treatment level and prognosis of stroke patients.

Materials and Methods

325 new acute stroke patients who were admitted to emergency department from April 2014 to March 2015 were divided into 2 groups, rescued by MPDS (n=171), and group that go to ER by themselves (n=154). The time of first-aid, case fatality ratio, complication rate, NIHSS and Barthel Index scores were compared between two groups.

group	n	time		at discharge	
		Onset to ER	Admission to CT/MRI	Percentage reduction of NIHSS	BI score
MPDS group	171	74±12[b]	26±10[b]	38.6±10.7[b]	66.6±23.0[b]
Go to ER on their own group	154	158±22	57±18	20.9±11.9	52.8±20.5

group	n	complication (rate%)		Deaths (case fatality ratio%)
		airway obstruction	hernia cerebri	
MPDS group	171	3(1.8)[b]	7(4.1)[a]	6(3.5)[a]
Go to ER on their own group	154	14(9.2)	16(10.5)	15(9.7)

*Compared to on their own group, [a]P<0.05,[b]P<0.01

Results

Time of admission to the emergency department, case fatality ratio and complication rate of MPDS group are significantly lower than go to ER on their own group (p<0.05). The Barthel Index scores and reduced NIHSS scores of discharge of MPDS group are significantly higher than go to ER on their own group.

Conclusion

With the advantage of on-site assessment, telephone guidance and classification disposal, MPDS can provide timely and effective treatment for stroke patients, significantly reduce case fatality ratio and disability rate, improve the prognosis of stroke patients.

References

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