Effect of neck collar fixation on traumatic patients` ventilation with Glasgow Coma Scale 15 by Capnography

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Abstract:

Introduction:

Trauma was the causes of death in young people and workforce in the world. The spine injury was 4.8% that half of them as for cervical spine injury. Use of Long backboard, sand bags and Kendrick it is necessary to stabilize the spine. The aim of this study was evaluation of the effect of neck collar in traumatic patients` ventilation with Glasgow Coma Scale 15 by Capnography.

Methods:

In a interventional and before after study that performed in emergency department of Tabriz university of medical science, effect of neck collar in traumatic patients` ventilation with Glasgow Coma Scale 15 by Capnography was evaluated.

Results:

65% of patients were male and 35% of them were female. Mean ET-Co_2 of patients by Capnography without neck collar was 34.62 ± 4.46 and mean ET-Co_2 of patients by Capnography with neck collar was 34.21 = 2.31. Mean respiratory rate without neck collar was 16.82 ± 6.89 and mean respiratory rate of patients with neck collar was 17.69 ± 3.90.

Mean O_2 Sat. of patients without neck collar was 95.45 ± 3.08 and mean respiratory rate of patients with neck collar was 95.56 ± 1.70.

Conclusion:

Significant difference was not found in Mean ET-Co_2 of patients by Capnography in patients whit and without neck collar (P=0.196). Significant difference was not found in mean respiratory rate of patients whit and without neck collar (P=0.196).

Significant difference was not found in mean O_2 Sat. of patients whit and without neck collar (P=0.196).

Key Words:

Capnography, Neck Collar, Trauma, Patients` Ventilation, ET-Co_2