

Výsledky: Správné uchopení ramen a kolen použilo 445 (89 %) a 430 (86 %) účastníků. U ostatních bylo pozorováno suboptimální uchopení, např. za zápěstí nebo kotníky, což ohrožovalo kontrolu a stabilitu. Byla měřena a hodnocena rotace páteře postiženého: 170 (34 %) účastníků vykazovalo asymetrii kvůli špatné koordinaci. Byla odvozena exploratorní referenční rozmezí specifická pro tuto studii na základě subjektivního hodnocení jednoho standardizovaného pacienta v rozsahu 20–40° úklonu (čehož dosáhlo 347 účastníků) a pro rotaci kolem osy 90–110° (toho dosáhlo 309 účastníků).

Závěr: Byla pozorována značná variabilita při ukládání do zotavovací polohy, zejména při záklonu hlavy a přetáčení těla. Je zapotřebí dalšího výzkumu k určení optimálních úhlů polohování a k posouzení, nakolik jsou vyškolené osoby prakticky schopny dosahovat optimální zotavovací polohy.

Klíčová slova: zotavovací poloha, polohování, první pomoc, život zachraňující manévry, laický zachránce.

Background

Positioning an injured person is one of the fundamental steps in providing first aid, which all those present at an emergency are obliged to do, both legally and morally. Proper positioning can maintain the casualty's vital signs until emergency medical services arrive, whereas incorrect techniques may result in significant harm. Some of the basic positions used in practice include the recovery position, the seated position with upper limb support, and the supine position [1]. It is the recovery position that helps to maintain a patent airway in an unconscious person and prevents aspiration of gastric contents. It can be used in both children and adults, but always assuming spontaneous breathing and circulation are present (i.e., it does not meet the conditions for initiating resuscitation) [2, 3].

Currently, there are still few conclusive studies on the optimal recovery position. Its use was recommended by the European Resuscitation Council (ERC) as early as 1992 [1, 4]. The 2021 and 2025 ERC guidelines recommend to:

- kneel beside the casualty, make sure that both their legs are straight and parallel;
- place the nearer upper limb at a right angle to the body with the palm of the hand facing up;
- bring the more distant upper limb across the chest and hold the back of the hand against the face of the casualty;
- with the other upper limb, grasp the more distant lower limb just above the knee and pull upwards, keeping the leg on the ground;
- keep the hand pressed against the face and pull on the far lower limb to roll the casualty onto his or her side;
- adjust the upper part of the lower limb so that the hip and knee are bent at right angles;
- perform a head tilt and ensure that the airway remains clear;
- if necessary, adjust the arm under the cheek so that the head remains angled and pointing downwards, i.e., to allow liquid substances to drain from the mouth;
- periodically check the sufferer to ensure that they are breathing normally [5, 6, 7].

It is advisable to use a blanket or isothermal foil to prevent heat loss. We place those who are vomiting (e.g., an intoxicated person) or bleeding from the mouth or nose into the recovery position. We never leave the affected person unattended, only when treating other

affected people, if we have to leave the casualty for a reason, for example to summon professional help or to treat other injured persons [1, 8].

Airway clearance and maintenance is one of the essential actions that must be performed by a lay rescuer prior to the arrival of emergency medical services. This skill should be mastered by every person. Medical dispatchers are able to guide the rescuer step by step on exactly what to do to clear the unconscious person's airway by advancing the jaw and tilting the head slightly. In the same way, the airway is cleared in the recovery position [1]. Prevention of aspiration, i.e., adequate positioning into the recovery position, is of primary importance in a person with impaired consciousness [5, 6, 7].

This performance-variability study analyzes the variations and degree of consistency in the application of techniques used by the study group to place an injured person into the recovery position. The study primarily examines performance variability in adjusting cervical spine rotation and flexion as part of preventive measures. We started from the hypothesis that the practical performance of the procedure by the study group would exhibit a significant degree of variability (inconsistency).

Methods

Study Design. This study employed an experimental design to assess the practical skills of trained non-medical personnel in placing an unconscious individual into the recovery position, with a specific focus on evaluating their technique for turning the person over and moving the head within the cervical spine. A total of 500 participants aged 15 years and older were recruited from health science high schools and university programs. Participation was voluntary, with no financial or other incentives. Prior to study commencement, participants were informed that they could withdraw from the experiment at any time without providing a reason. The STROBE guideline for observational studies is used for data presentation.

Participants. Each participant completed an initial anonymous questionnaire to gather background information on their education, previous experience in placing individuals into the recovery position, familiarity with airway obstruction risks (such as aspiration in cases of nausea and vomiting), and knowledge of associated complications. The questionnaire primarily used dichotomous (yes/no) questions, with multiple-choice options available for questions regarding the source of their knowledge on the recovery position.

Setting. In the experimental phase, each participant was asked to position a standardized patient, representing an unconscious individual,