

Abstract

In the presented diploma thesis I deal with the issue of proper insertion of short-term central venous catheters, adherence to procedures by medical and non-medical staff according to CDC guidelines 2011 during insertion and subsequent treatment in intensive care in a faculty-type medical facility. The aim of the diploma thesis is to determine the occurrence of complications, especially infectious, the level of adherence to recommended procedures in practice according to 2011 CDC guidelines, central venous catheter manipulation, comparison of real activities with recommendations and mapping the level of knowledge of non-medical staff about short-term central venous catheters.

The theoretical part deals with the importance of clinical guidelines, central venous catheter in general, complications associated with the central venous catheter and prevention of infectious complications of invasive inputs. For the empirical part of the diploma thesis, a prospective non-randomized observational study of cannulation and possible complications associated with a short-term central venous catheter according to CDC 2011 guidelines was chosen to determine real procedures for insertion, treatment and removal of a short-term central venous catheter. This was supplemented by an exploratory questionnaire survey of the knowledge of non-medical staff from the environment of intensive care and anesthesia about the insertion, treatment, removal of short-term venous catheters and the occurrence of possible complications.

The results of the study showed that due to adherence to the professional procedures recommended by the CDC 2011 guidelines, the incidence of infectious complications in the observed short-term induced central venous catheters is lower than in one third of the indwelling catheters. However, the exploratory questionnaire survey of non-medical staff statistically proved the level of knowledge about short-term central venous catheters and showed the need for systematic replenishment, practice and strengthening of knowledge about central venous catheters through regular seminars, workshops, quality and systematic mentoring of existing and new staff. Last but not least, increasing the level of foreign languages leads to the availability of professional articles, studies, guidelines and thus to increasing the level of knowledge and skills of non-medical staff.

Key words: central venous catheter, CDC guidelines, complications, nursing procedures, intensive care