

Abstract

This diploma thesis is related to peripherally inserted central venous catheters (PICC), the role of nursing staff in inserting and care of these systems. The aim of the work, which is partly based on PICC project organized by the Department of Anaesthesiology and Intensive Care Medicine, 1st Faculty of Medicine of the Charles University and General University Hospital in Prague, was to investigate the quality of life in patients with PICC after their insertion, to evaluate the incidence of complications (venous thrombosis, bacteraemia, sepsis, local infections, decubitus, disconnection of the system, mechanical complications, etc.) and compare the economic efficiency of PICC systems with other available methods. The aim of the second part of the thesis, which is unrelated to the previously mentioned project, was to reveal the awareness of nurses/paramedics on PICC catheter.

This thesis has two traditional parts – theoretical and empirical. The theoretical part deals initially with the central venous catheter in general and then it describes main features of the PICC systems. The following part reviews indications, insertion techniques and potential complications associated with the PICC systems. The role of nursing staff in the insertion and maintenance of these systems is also highlighted.

The empirical part is divided into two sections. The first section consists of an exploratory questionnaire survey, where the awareness of nurses/paramedics on the PICC is examined, while the second one proceeds from the above mentioned project and presents an evaluation of the benefits of PICC catheter use in intravenous treatment.

The results of the exploratory questionnaire, which involved 27 nurses from the Oncology Clinic of the 1st Faculty of Medicine of the Charles University and General University Hospital in Prague and 34 nurses/paramedics from Clinic of Anaesthesiology, Resuscitation and Intensive Medicine (KARIM) of the Charles University and General University Hospital in Prague, prove that there is no statistically significant difference between the awareness of the nurses/paramedics of the individual clinics. The resulting figure of the PICC Project prospective audit is that out of 76 patients with the catheter, three-quarters (76.31 %) were content with it. 19.74 % of the PICC catheters had to be removed due to complications, with more than half of them (53.33 %) being mechanical complications.

A major limitation for this work is the still ongoing research, which makes testing all the hypotheses rather impossible.

Key words

peripherally inserted central catheter, role of nurse, ultrasound, complications, quality of life, economical efficacy