

VISOKA ZDRAVSTVENA ŠOLA V CELJU

DIPLOMSKO DELO

**UPORABA ALTERNATIVNIH PRIPOMOČKOV ZA VZPOSTAVITEV
INTRAOSALNE POTI V NUJNI MEDICINSKI POMOČI**

**THE USE OF ALTERNATIVE DEVICES FOR INTRAOSSEOUS
ACCESS IN EMERGENCY MEDICAL ASSISTANCE**

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POVZETEK

Uvod: V urgentni medicini se še vedno preveč časa in energije vloga v vzpostavitev intravenskega dostopa predvsem pri življenjsko ogroženih pacientih s slabim žilnim pristopom, pri katerih sta uspešnost in čas njegove vzpostavitve bistvenega pomena. Intraosalni pristop je dokazano njegova hitrejša, varnejša in učinkovitejša alternativa za dostavo učinkovin v centralni krvni obtok, ki zagotavlja podobne farmakokinetične in farmakodinamične lastnosti apliciranih učinkovin. Z raziskavo smo želeli ovrednotiti uporabo intraosalnega pristopa in pripomočkov med izvajalci zdravstvene nege v nujni medicinski pomoči.

Metode dela: Uporabili smo kvantitativno deskriptivno raziskovalno metodo. Za pridobitev podatkov smo uporabili strukturiran anketni vprašalnik in neslučajni, namenski vzorec 40 izvajalcev zdravstvene nege v nujni medicinski pomoči reševalne postaje in prehospitalne enote Zdravstvenega doma Celje. Realizacija vzorca je bila 90 %. Podatke smo obdelali s pomočjo programa Microsoft Office Excel 2013.

Rezultati: Med anketiranimi jih 10 (27,8 %) intraosalnega postopka še ni izvedlo. 19 (51,4 %) bi jih pri nastavitvi intraosalne poti pri 2-letnem kritično bolnem otroku, kjer intravenska pot ni uspela, potrebovalo pomoč izkušenega sodelavca, 13 (37,1 %) pa bi jih k postopku suvereno pristopilo. O pripomočku BIG[®] ima tako teoretično kot praktično znanje 31 (86,1 %) anketiranih, o pripomočku FAST[®] pa 18 (50 %) anketiranih. 16 (44,4 %) anketiranih ima praktično znanje o izvedbi postopka na lutki, 13 (36,1 %) jih ima praktično znanje o izvedbi postopka pri pacientu, 6 (16,7 %) vprašanih pa ima le teoretično znanje.

Razprava in sklep: Z našo raziskavo smo potrdili, da je uporaba intraosalnega pristopa v praksi prej izjema kot pravilo, kljub temu da je seznanjenost izvajalcev zdravstvene nege v nujni medicinski pomoči s postopkom in pripomočki za njegovo izvedbo dobra. Za odpravo glavnih razlogov (pomanjkanja izkušenj in strahu pred zapleti) pa bodo morale poskrbeti ustanove, kjer se izvaja nujna medicinska pomoč, z dodatnim rednim internim usposabljanjem svojih zaposlenih, kar je tudi potreba in želja udeležencev raziskave.

Ključne besede: intraosalna pot, intraosalna aplikacija zdravil, pripomočki, nujna medicinska pomoč.

SUMMARY

Introduction: In emergency medicine, too much time and energy is invested in the establishment of intravenous access, especially in life-threatened patients with poor vascular access, where the success and the timing of its establishment is essential. An intraosseous access has been proven to be its faster, safer and more efficient alternative to delivery of active ingredients to the central circulation, which provides similar pharmacokinetic and pharmacodynamic properties of the administered drugs. With the research, we wanted to evaluate the use of the intraosseous access and devices among nursing care providers in emergency medical assistance.

Methods: We used a quantitative descriptive research method. In order to obtain data, we used a structured questionnaire and a random sample of 40 health care providers in the emergency medical assistance of the rescue station and the pre-hospital unit of the Health Center Celje. The realization of the sample was 90 %. The data was processed by using Microsoft Office Excel 2013.

Results: 10 (27.8%) of the respondents did not yet carry out an intraosseous procedure. 19 (51.4%) of them would require the assistance of an experienced co-worker when establishing an intraosseous access in a 2-year critical ill child, where the intravenous access failed, while 13 (37.1%) would make it in a sovereign way. 31 (86.1%) of the respondents have theoretical and practical knowledge about the BIG[®] utility, and 18 (50%) of the respondents about the FAST[®] device. 16 (44.4%) of the respondents have practical knowledge of the procedure on the doll, 13 (36.1%) have practical knowledge of the procedure in the patient, and 6 (16.7%) of the respondents have only theoretical knowledge.

Discussion and conclusion: Our research confirmed that the use of an intraosseous access in practice is an exception rather than a rule, despite the fact that the knowledge of nursing care providers in emergency medical assistance with the procedure and devices for its implementation is good. In order to eliminate the main reasons (lack of experience and fear of complications), institutions with emergency medical assistance will need to be provided with additional regular internal training of their employees, which is also the need and wishes of the research participants.

Key words: intraosseous access, intraosseous application of medication, devices, emergency medical assistance.