

**A. Falavandishvili, B.Kvinikhidze, K.Kerdzevadze, S.Maxarashvili, Z.Kheladze, Zv.Kheladze**

**Peculiarities of providing anesthesia in old age critical patients.  
(Critical Care Medicine institute, Tbilisi, Georgia).**

There are examined peculiarities of conducting narcosis in critical patients of aged people. Chosen narcosis is considered to be intravenous multi-component endotracheal narcosis. During operations conducted in lower limbs, small pelvic organs there is provided spinal anesthesia with maintaining spinal anesthesia. At the time of small amount operations chosen narcosis is venous narcosis with maintaining spontaneous narcosis. The previous preparing, narcosis and period after narcosis were conducted on the background of critical care medicine service. With this method of approach lethality of causing narcosis directly during conducted generally surgical, traumatologic, urologic and neurosurgical operations in 87 old patients.

**Key Words:** narcosis, critical patients, aged people

**Intraduction:** In the recent years the average duration of human life is progressively increasing. The most growing segment of population is aged people. Year by year there are augmented the amount of old critical patients in hospitals of critical care medicine. A huge amount of these patients need surgical operation that conducts by means of narcosis. Unfortunately peculiarities of controlling narcosis in critical conditions of aged people is not fully studied (Z. Kheladze, 2007). Consequently the purpose of this work is to study peculiarities of controlling narcosis in old patients.

**Materials and methods:** there were analyzed 87 patients of critical condition whose age was between 70-87, including 55 men and 32 women. Different types of generally surgical, traumatological and neurosurgical operations under the spinal anesthesia had 55, endotracheal narcosis 24, and venous anesthesia 8 patients. Apart from age, condition of patients was complicated with accompanying diseases like pneumonia, diabetes, cardiac failure, ischemic insult, and so on. Evaluation of their condition happened by ASSA classification. At the time conducting operation under narcosis or after is there was no lethal outcome during 24 hours.

**Results and discussion:** patients had preparation before an operation in critical care medicine clinic that was expressed by artificial pulmonary ventilation, antibacterial and detoxification therapy, correcting of changing water and electrolytes, recovery of blood circulation and other various standard activities. It should be noted that preparation before operation was conducted in a small period of time, namely in several hours and patients enter in operation room until the complete recovery of vital functions. Because of this critical care medicine was continuing during and after operation. The guarantee of lethal outcome in critical patients of aged people apart from optimal preparation before operation was anesthesia that was chosen correctly. The general request with anesthesia is considered to be it's less traumatic character and ability of control. From this point of view the type of optimal "narcosis" was multi-component endotracheal narcosis. In addition

selecting of narcosis type happened with consideration of patient's general condition, basic disease, and surgical operation. From this angle, the important fact is that old age affects on pharmacokinetics pharmacodynamics of anaesthetic anesthesia. With the age, in organism there is decreased amount of water and increased fat amount. This affects on redistribution of medicaments in organism. Also in plasma there is reduced amount of albumens that blocks elimination of anesthetics. In old patients there is decreased demand on barbiturates, benzodiazepines and other anesthesiological means. Because of non-desirable lateral events and difficulty of controlling there is not desired to use inhalational anesthetics. In critical care patients during endotracheal narcosis there was preferred to utilize midazolam medicaments and narcotic analgesics. During these operations usage of relaxants happened with little doses. Alongside with age blood circulation in muscles is reduced and relaxants begin to activation slowly than in patients of average age and process of it's dismissal happens lately. Directly from relaxants, preference was ascribed to non-depolarizing muscle relaxants. It should be noted that operational interfere was conducted under critical care medicine brigade and control vital functions directly. After an operations patients continue treating in clinic where happened control of respiration, blood circulation and other vital functions. Operations were conducted under spinal anesthesia in order to avoid long being of old patients on controlled respiration. The advantage of spinal anesthesia was also smaller risk of developing thromboembolia after an operation that was conditioned with peripheral vasodilatation and maintaining blood circulation in lower limbs on an adequate level. It is evident that spinal anesthesia was conducted on lower limbs and organs of small pelvis. But utilizing of this anesthesia was impossible at the time of shock in case of impossibility an desired result. At the time of comparatively small operations was used intravenous anesthesia with maintaining of spontaneous respiration. In this case chosen medicaments were midazolam and combination of narcotic analgesics of little period of activity.

**Conclusion:** surgical interfere in old aged critical patients is better to conduct by means of endotracheal multi-component intravenous anesthesia. On the lower limbs and organs of small pelvis there can be utilized spinal anesthesia on the background of maintaining spontaneous respiration. At the time of operations of small volume there was used multi-component venous anesthesia on the background of spontaneous breathe.

### References:

Z. Kheladze, "The Critical Care Medicine" 2007, -614page.

ა.ფალავანდიშვილი, ბ.კვინიხიძე, ქ.კერძევაძე, ზ.ხელაძე, ზ.ხელაძე  
ანესთეზიის უზრუნველყოფის თავისებურებანი მოხუცთა ასაკის კრიტიკულ  
პაციენტებში.

(კრიტიკული მედიცინის ინსტიტუტი, თბილისი, საქართველო)

შესწავლილია მოხუცი ასაკის კრიტიკულ პაციენტებში ნარკოზის ჩატარების თავისებურებანი. არჩევის ნარკოზად მიჩნეულია ინტრავენური მრავალკომპონენტიანი ენდოტრაქეული ნარკოზი. ქვედა კიოდურებზე, აგრეთვე მცირე მენჯის ღრუს ორგანოებზე წარმოებული ოპერაციებისას მოწოდებულია სპინალური ანესთეზია სპონტანური სუნთქვის შენარჩუნებით. მცირე მოცულობის ოპერაციებისას კი არჩევის ნარკოზს წარმოადგენს მრავალ კომპონენტიანი ვენური ნარკოზი სპონტანური სუნთქვის შენარჩუნებით. როგორც ნარკოზის წინა მომზადება, აგრეთვე ნარკოზი და ნარკოზის შემდგომი პერიოდი უნდა მიმდინარეობდეს კრიტიკული მედიცინის სერვისის ფონზე ამგვარი მიდგომით, 87 მოხუც პაციენტში ჩატარებული ზოგად ქირურგიული, ტრავმატოლოგიური, უროლოგიური და ნეიროქირურგიული ოპერაციებისას, უშუალოდ ნარკოზით გამოწვეული ლეტალობა არ აღნიშნულა.