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**Peculiarities of Surgical Treatment in Critical Patients of old age.**  
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93 older patients in critical state were studied, who were operated various surgeon operations. Conclusion is made that, in order to define diagnosis, para-clinical tests should be carried out daily for these patients and surgeon operation shall be carried out after a short-term pre-operation preparing. Time of surgeon operation should be as short as possible and causing fewer traumas. Due to this sometimes it needs to split operation by stages. In such case at the first stage the life danger causing reason shall be liquidated and other stages of operation shall take place in next days, based on conditions of the patient. Less aggressive method of pain killing should be used for operation. Management of critical state should be continued permanently, both during the operation and after the operation.

**Key words:** Older patient, critical condition, surgery, operation.

**Intraduction:** Population of the earth is aging yearly. Due to the fact number of older patients is increased in hospitals. The process is such an important thing that in 1990 General Assembly of UNO accounted October 1 as International Day of Older. It is considerable that number of older patients in critical care medicine clinics is increasing daily. In addition a certain part of patients need surgery treatment. Unfortunately, study of peculiarities of older patients in critical state is still accomplished poorly. The peculiarities include issues of both diagnosis and operation tactics. Namely: such patients often enter the clinic in shock condition, with lost consciousness, mono- or poly-organic failure. This complicates to define diagnosis at the earlier stage. As well it is know that ability of regeneration and reparation is lowered in older patients, immune reactions are lowered, that helps generalization of infection. As well tissue destruction is developing faster, that is caused by deep atherosclerosis changes in arteries. Condition of a patient is as well complicated by accompanying diseases, which in the contingent of such patients are multiple in the form of atherosclerosis, diabetes and others. Final results of treatment as well are affected by the complications, which are arisen in the process of main disease, in the form of pneumonia, heart failure, tromboemboly, wound suppuration and others. It should be implicated that it is quite difficult to recognize them, as they often occur without symptoms and are revealed only by relevant para-clinical tests. As well in adoption of surgery tactic, it is important to assess viability of a patient, his/her reserve strengths, capacity of possible operation and other. In making the decision, necessity of liquidation of pathology danger to life by means of short time operation. In this point, often it is required to make operation in several stages. So, surgery treatment of older patients is characterized with such peculiarities, which we not face in critical patients of young age and adults. Due to this a detailed study of these issues has a certain importance in treatment of patients in critical condition.

**Material and methods:** This thesis is based on study of 93 patients in critical condition and analysis of surgery treatment. These patients in the years of 2012-2013 were treating in Critical Care Medicine Institutes of Georgia. In the process of their treatment it became necessary to make general

operations of various difficulties. Age of the patients was from 60 up to 87 years. Details of the patients are given in the tables:

Table #1. Details of patients:

Patients' age	Number	Man	Woman	Died	Recovered
60-70	42 -(45.2%)	30 -(32.2%)	12 -(12.9%)	2 -(2.1%)	40 -(43%)
70-80	40 -(43%)	26 -(27%)	14 -(15%)	5 -(5.3%)	35 -(37.6%)
80>=	11 -(11.8%)	7 -(7.5%)	4 -(4.3%)	1 -(1.1%)	10 -(10.7%)
Total	93 -(100%)	63 -(67%)	30 -(32%)	8 -(8.6%)	85 -(91.3%)

Table #2. Details of operations and pain killing:

Type of pain killing	Number	Type of operation			
		Limb amputation Adenomect.	Laparotomy	Hernia cut	
Local pain killing	6 (6.4%)	6 (6.4%)	0	0	0
In Vein	8 (8.6%)	3(3.2%)	0	3(3.2%)	0
Spinal	55 (26.8%)	44 (47.3%)		2 (2.1%)	8 (8.6%)
General or	24 (25.8%)	1 (1.1%)	22 (23.6%)	1 (1.1%)	0
Total	93 (100%)	48 (51.6%)	22 (23.6%)	6 (6.4%)	8 (8.6%)

Table #3. Details about types of critical condition:

Age	Endo-toxic shock	Septical shock	Post-hemorrhage shock	Trauma shock
60-70	36 (38.7%)	3 (3.2%)	2 (2.1%)	1 (1.1%)
70-80	37 (39.7%)	2 (2.1%)	0	0
80>	9 (9.6%)	2 (2.1%)	0	0
Number	82 (88.1%)	7 (7.5%)	2 (2.1%)	2 (2.1%)

8 patients from 93 critical patients were died - 4 men and 4 women. Among them: 2 patients died from total thrombosis of mesenteries vessels, 3 patients - from universal purulent peritonitis, 3 patients - endo-toxic shock and limb diabetics gangrene. 4 patients were treated with various types of operations.

The patients stayed in the clinic for 466 bed days and average waiting time constitutes 5 days.

Different methods of pain killing were used during the operations, including spinal pain killing – 55 times, general narcosis – 24 times, in vein – 8 times. Local pain killing – 6 times.

**Results and discusion:** These patients were treated according to the protocols adopted in the clinic, based on the internationally recognized requirements and the surgery practice obtained during many years by treatment of such patients. The main difficulties in the patients of such contingent, is a

correct and complicated diagnosis. Often patients enter the clinic in unconscious state, diagnosis is difficult to accumulate. In order to avoid any mistake, often para-clinical tests are made on a daily basis (echoscope test, blood and urine general tests). Pre-operation times in these protocols are shortened and not exceed 2-3 hours. This is conditioned by the opinion that comparatively longer preparation is often associated to complication of general state of a patient, which should be caused by progressing the critical condition. As well it is necessary to use more simple and less aggressive method of pain killing. Due to this most of the operations are being made under spinal pain killing method. As well duration of operations is significantly shortened. During surgery operations in the patients of this contingent it is extremely important to maintain co-ordination of surgery team, which shortens time of operation. In this consideration, it is expediency to split operations by stages. The first stage is liquidation of life danger causing reasons, to be performed in the shortest time, in the form of the minor surgery involvement. In this consideration, in some cases priority should be assigned to less aggressive and trauma contained methods of pain killing. Such surgeries are: when ulcer bleeding – at the first time bleeding is stopped, by sewing up the ulcer, in case of acute cholecistitis – gall-bladder drainage, in case of purulent processes – discharge of purulent by puncture or cutting up and others. In case of prostate adenoma –nephrostoma and the other stages of operation are followed in the next days. It is to be considered that after operation in the post-operation period no complications were revealed. Rehabilitation measures had been starting from the next day after operations and the latter was in process along with monitoring of critical state.

**Conclusion:** Older patients in critical state should be treated a surgery after a short-time pre-operation preparation. Duration and volume of operation should be extremely shortened. Surgery may be divided into stages. Management of critical care should be continued after operation. In the post-operation period, as well it is required to start rehabilitation measures at the early stage

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შესწავლილია 93 მოხუცი ასაკის კრიტიკულ მდგომარეობაში მყოფი ავადმყოფი. ღომლებსაც ჩაუტარდათ ქირურგიული ოპერაცია. გამოტანილია დასკვნა, რომ ამგვარ ავადმყოფებს ქირურგიული ჩარევა უმჯობესია ჩაუტარდეს ხანმოკლე წინასაოპერაციო მომზადების შემდეგ. უშუალოდ ქირურგიული ჩარევა, კი შეძლებისდაგვარად ხანმოკლე და ნაკლებად ტრავმული უნდა იყოს, ამის გამო ზოგჯერ საჭირო ხდება ოპერაციის ეტაპებად დაყოფა. ამ შემთხვევაში პირველ ეტაპზე წარმოებს სიცოცხლისთვის საშიში მდგომარეობის გამომწვევი მიზეზის ლიკვიდაცია. ოპერაციის სხვა ეტაპები კი ხორციელდება შემდეგ დღეებში ავადმყოფის მდგომარეობის მიხედვით. ოპერაციისას გამოყენებული უნდა იქნეს გაუტკივარების ნაკლებად აგრესიული მეთოდი. კრიტიკული მდგომარეობის მენეჯმენტი კი პერნამენტულად უნდა მიმდინარეობდეს, როგორც ოპერაციის დროს, ისე ოპერაციის შემდეგ პერიოდში.