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Peculiarities of treatment of critical insult of old age
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In average, 80% of insults happen after age of 60, increasing risk of insult in olds is related to ongoing aging changes. This process is characterized by high lethality and invalidity. The work is based on treatment analysis of patients with disorder of blood circulation in brain. There were examined 100 critical patients: 67 of them had ischemic insult and 33- hemorrhagic, this included 73 men and 27 women; age of patients was between 70-93. We have determined the basic changes of old people in this condition, risk factors of development the insult, accompanying diseases, variety of insults, localization, showings of lethality and invalidity. As a result we can say that process of critical insults in old people is marked by the certain peculiarities and they must be considered during treatment.

Key Words: critical insult, old age, risk factors

Intrroduction: is known that 80% of insults happen in the age after 70. The risk of developing insult in old people is ongoing changes in that brain at that time. In addition to that, old people are more tend to acute character of disease and lethal outcome. Consequently treating of insults in this age is very significant and considerable.

Materials and methods:This work is based of treatment analysis of olds with disorder of blood circulation in brain. There were analyzed 100 critical patients entered in the Georgian Institute of Critical Care Medicine in 2013. The ischemic insult had 67 and hemorrhagic- 33 patients, from them, 73 were men and 27 women. The age of patients was between 70-93 years. Examining of patients conducted by means of protocols accepted in the clinic which included brain's nuclear-magnetic resonance, spiral computer tomography, transcranial doplerography, encephalography and other special analysis. There were studied risk-factors of development of insults in old people, accompanying diseases, variety of insults, localization, data of lethality and invalidity.

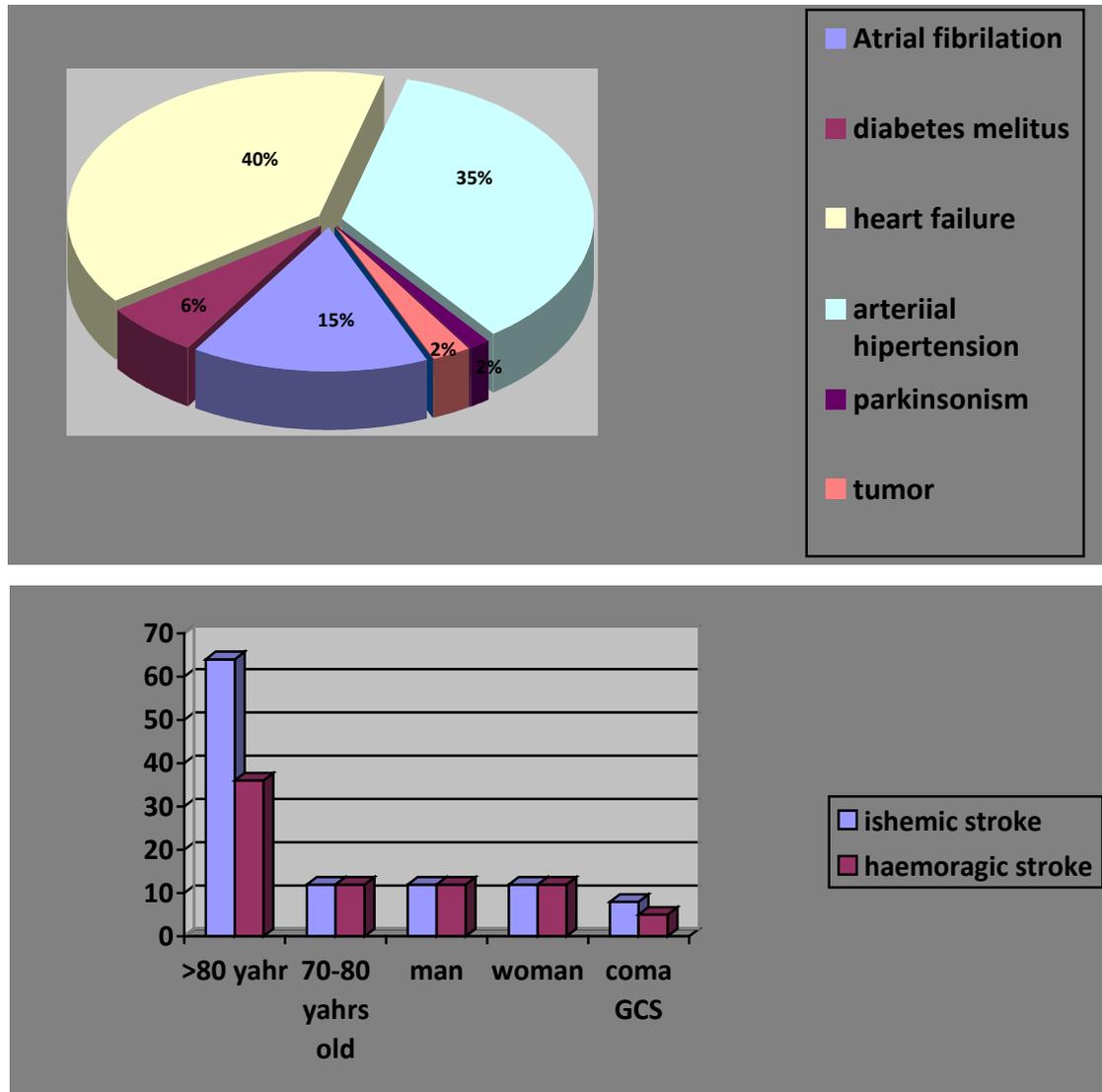
Results and discussion:The likelihood of development insult increases for 2 times in each 10 years despite gender issue. This is more evident in patients after 70. It is known that according with increasing the age, brain's volume and size is decreased because of it's atrophy. Moreover, degenerative changes happen in brain in brain's cortex's white and grey substances. The same changes are in ganglions and neurons. Hence almost in 50% there are leukoaraiosis and leukoencephalopathy; alongside with age conductivity of hematoencephalic barrier is increased and coming out of liquid from blood vessel's aperture and injury of neurons and also in brain cortex, there are accumulated glutamate and lactate that causes electrolytic misbalance in brain that is followed by necrotic changes in brain's certain cells. Moreover they reduce the blood vessel's reservoir of brain and it becomes more sensible to ischemia. And may be because of this there are more frequent ischemic insults in olds. In the form of this table there are given data of changes happening in aged peoples' brain.

The general changes happening in aged peoples' brain

Age changes	Brain's structural Injury	Disorders of the function
Reduce of brain is size	Brain cortex's grey substance	Cognate disorders, dementia
Cerebral macroangiopathy	White substance and basal ganglions	Multiple isolated small size disorders;leukoaraiosis, cognate disorders, dementia, Blood vessel parkinsonism
Cerebral amyloidangiopathy	Leptomeningreal and cortex arteries, penetrating arteries, and arterioles	cognate disorders, dementia, subarachnoid and intercerebral hematomas
Effacement of cerebral arterioles	White substance of brain And arterioles	Reduce of supply of brain with blood and it's perfusion, dementia, Alzheimer disease
Multiple pathological changes	Various areas of brain	Cognitive disorders, dementia
Widening of brain ventricles	Ventricles of brain	Reduce of flowing of cerebral-spinal fluid and dementia

The risk factors of development insult in old are:

- The gender: insult in men is frequent before 80 years (%) and in women after 80 years (%).
- Ciliary arrhythmia after 80 age is almost always (%) associated with ischemic insult.
- Arterial hypertension is more associated with hemorrhagic insults (%).
- Cardiac blood vessel diseases and other accompanying diseases are often (%) connected with ischemic insult.
- Carotid arteries stenosis is a very significant risk-factor but revelations of them are not evident until development of insult.
- High level of cholesterol in blood plasma – is an also frequent risk factor.(%)
- Diabetes and metabolic disorders- is a wide risk factor of insult in olds and is characteristic to hemorrhagic insult (%).



Peculiarities of clinical revelations:

- For old age there is characteristic sign not only sharply expressed neurologic deficit but generally brain showings.
- They are marked by slower and long ongoing.
- There are frequent prosthetics of vital functions, controlled respiration, stabilization of blood circulation, and so on; mentioned processes occur on late stage of disease (after a week).
- By the form of complication often occurs polyorgan failure, pneumonias and complications of blood vessel system rather than brain congestion and syndrome of brain stem compression; cognitive disorders and encephalopathy are often.
- Patients have simultaneous diseases, including fibrillating arrhythmia, arterial hypertension, cardiac failure, diabetes, dementia, Parkinson disease, Alzheimer disease, and combinations of other diseases which increase the risk of lethality.
- The significant factor is development of adaptation with artificial respiration that complicated transfer from controlled breathe to spontaneous.

- Vegetative condition after insult is hardly ever seen because patients with this injury are died after the clinical picture of this condition.
- In this age repetition of insults is frequent.
- Likelihood of lethal outcomes is high after the age of 75.

Peculiarities of treatment are:

The main direction is to remove hypoxia and maintaining brain's oxygenation and perfusion that are achieve by means of optimization of electrolytic balance and acid-alkaline one. The antiplatelet therapy in these patients; during 48 hours when occurs ischemic insult the antiplatelet therapy helps to avoid the next cerebral-cardiac complications. As for cerebral protectoral therapy during the both kinds of insults it is important to utilize magnum sulfate at the time of acute period of disease, during ciliary arrhythmia it is significant to use warfarin and INR control. Spasm of brain's blood vessel is seldom in old people, occurs reducing of flow and brain's nourishment, developing of bedsores is often, atrophy of muscles, syndrome of malignant leanness. In order to avoid these factors a right nutrition ration and calories are essential, also change a position in bed frequently, keep a hygiene-sanitary norms. In case of inflectional complications the antibacterial therapy is necessary. It is considerable to use fewer medicaments of different types if it is possible because in this age, a patient's organism is already overloaded by the action of various medicaments.

Peculiarities of prognosis are:

From the viewpoint of prognosis the lethality is high that averagely is 80%, including ischemic insult is % and hemorrhagic - %. In this age recovery processes in brain happen slowly and level of invalidity is always high in survived patients and life of them is associated with another life.

Conclusion: Passing of critical insults in old patients is marked by the specific peculiarities and they should be taken into consideration during treatment.

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შრომას საფუძვლად უდევს თავის ტვინში სისხლის მიმოქცევის მოშლის მქონე მოხუცთა ასაკის კრიტიკული მდგომარეობების მკურნალობის ანალიზი. გამოკვლეული იქნა მოხუცთა ასაკის 100 კრიტიკული პაციენტი. იშემიური ინსულტით იყო 67, ხოლო ჰემორაგიულით 33 პაციენტი, აქედან კაცი იყო 73, ქალი 27. ავადმყოფთა ასაკი მერყეობდა 70 წლიდან 93 წლამდე. განისაზღვრა მოხუცთა ასაკის თავის ტვინისათვის დამახასიათებელი ძირითადი ცვლილებები, ინსულტის განვითარების რისკ-ფაქტორები, თანმხლები დაავადებები, ინსულტის სახეობა, ლოკალიზაცია, ლეტალობის და ინვალიდობის მაჩვენებელი. შედეგად გაირკვა, რომ კრიტიკული ინსულტების მიმდინარეობა მოხუცთა ასაკში ხასიათდება მნიშვნელოვანი თავისებურებებით, რაც გათვალისწინებული უნდა იყოს ასეთი პაციენტების მკურნალობის პროცესში.