

How cosmos factors effects on treatment of critical patients**N.Ramishvili, Z.Kheladze, Zv.Kheladze, N.Kajaia.****Georgian Critical Care Medicine Institute. Tbilisi, Georgia.**

During solar eclipse and magnetic storms number of patients entering the Critical Care Medicine Clinic increased. Majority of them had nervous system (62%) and cardiovascular (42%) pathology. In terms of lethality any regulatory could not be found.

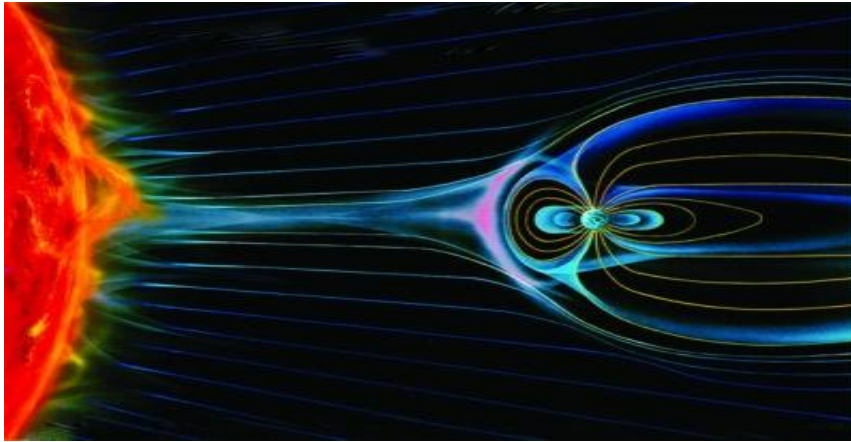
Key words: cosmos, treatment, patients.

Actuality:

Critical Medicine is one of the most expensive fields of health care. For the purpose of proper planning of clinic working and reasonable spending of expenditures, it is required to implement perspective development program for each clinic, based on data of the clinic, namely, patients loading, lethality and cost of a bed day. In the previous works, we discussed influence of sun and moon cycles on treatment of critical patients. As the result, there was revealed certain conformity of changes of entering critical patients in the clinic and indicators of lethality. ("Critical Care and Catastrophe Medicine" Z.Kheladze, D.Tabagua, N.Marshania, Zv.Kheladze, N.RamiSvili) Presently we studied some cosmos effects on treatment of critical patients, such as solar eclipse and magnetic storms. Solar eclipse is the event of covering the sun in full or partly by the moon. Solar eclipse is developing by cycles. Generally, one cycle includes solar eclipse and lunar eclipse occurring once. Very frequently eclipses may take place 3 times.



Formation of magnetic storm is caused from changing of sun rhythmical emanation.



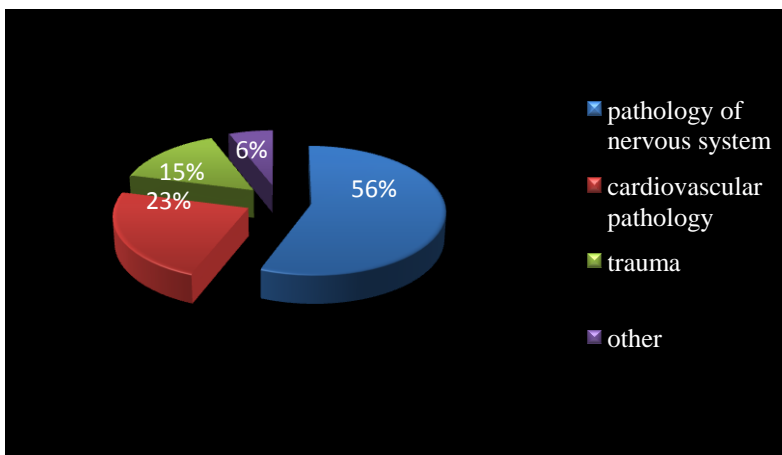
Magnetic days are evaluated by 10 scale system, 3 activity spheres mean magnetic days, 4 – dangerous, from 5 to 9 – 5th class, the most heavy magnetic days. Magnetic field with index 6 may be of lethal strength. On March 3 of the current year it was the strongest magnetic day. As well specialists of “NASA” fixed the last strong explosion on June 7. Within the last year this was the strongest spit out. In this case, speed of particles spitted out from the sun is increased; the particles are moving towards the earth. After entering into magnetic field of the earth, there start different changes.

Material and methods:

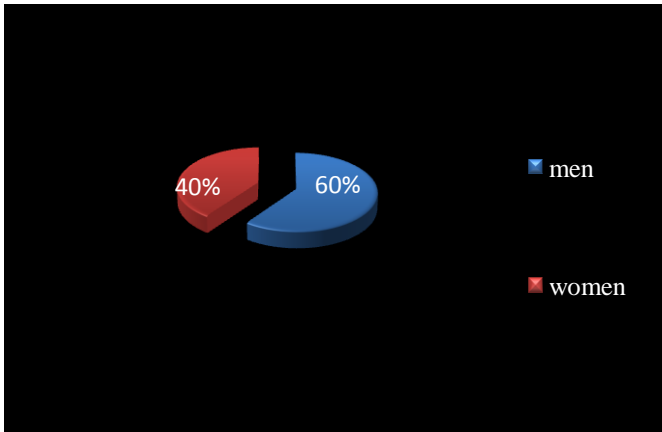
Data of 20 years working of critical clinic was studied. Total number of patients entered into critical care clinic was 6532.0 patients (100%), lethality 35.6%.

Results and discussion:

56% of the patients entered in the clinic within the period of solar eclipse had pathology of nervous system, 23% - cardiovascular pathology, 15% of them were entered in the clinic due to trauma injured in auto accident.

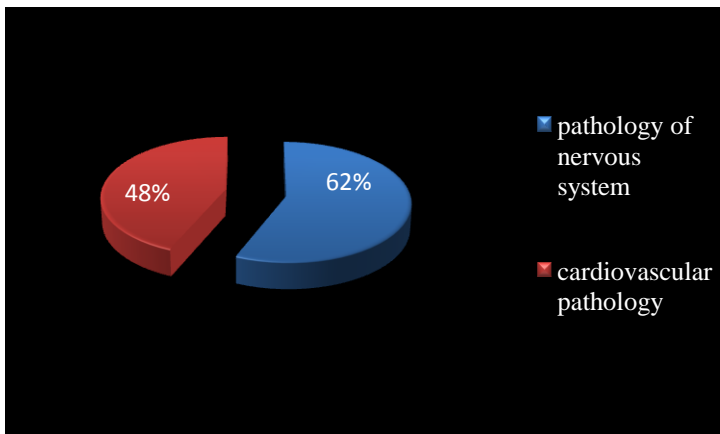


60% of the patients entered in the clinic for this period, were men, 40% - women.



Upon studying of lethality indicator, there was not found any significant conformity.

Within the period of magnetic storm, in critical care clinic, pathologies of nervous system and cardiovascular pathology were still dominating.



It is established, that upon increase of activity, magnetic field of the earth is being changing and this cause excitation of nervous system. There is developing increase of activity of sympathetic nervous system, the component of vegetative nervous system and these cause increase of frequency of heart rhythm, raise of pressure, and activity of para-sympathic nervous system is contrary weakened. Upon magnetic storm, the activity of stress hormones produced in the upper kidney gland is increased, function of production of melatonin epiphysis is weakened. Melatonin regulates normal rhythm of processes in the body; this is one of the most important immune modulators. And the reason of such changes is disorder of processes occurring in the body and finally this results infection, insult and other diseases. Magnetic storm as well has influence on the healthy people, though not similarly and not in such active form compared with sick ones. These changes are expressed by changes of mood, head ache, decrease of capability of working and other signs.

Conclusion:

Upon such cosmos events, such as solar eclipse and magnetic storms, the most of the patients entered in the critical care clinic showed pathology of nervous system and cardiovascular pathology. No conformity in relation with indicator of lethality was founded; on this background the research results should be considered for working of critical medicine clinic.

Literature:

1. Kheladze Z. "New steps in Critical Care Medicine" Tbilisi 1992
2. Kheladze Z. "Critical Care Medicine" Tbilisi. 2007

კოსმოსურ ფაქტორთა გავლენა კრიტიკულ ავადმყოფთა მკურნალობის პროცესზე
ნ.რამიშვილი, ზ.ხელაძე, ზ.ხელაძე, ნ.ქაჯაია.

საქართველოს კრიტიკული მედიცინის ინსტიტუტი. თბილისი, საქართველო.

მზის დაბნელების და მაგნიტური ქარიშხლების პერიოდში კრიტიკული მედიცინის კლინიკაში აღინიშნებოდა პაციენტთა შემოსვლის გაზვირება. მათ უმეტესობას აღინიშნებოდა ნერვული სისტემის (62%) და გულ-სისხლძარღვთა სისტემის (48%) პათოლოგია. ლეტალობის მაჩვენებლის მხრივ რაიმე კანონზომიერება აღმოჩენილი ვერ იქნა.

გასაღები სიტყვები: კოსმოსი, მკურნალობა, პაციენტები.