



Magnetic storms as a human infarction hazard: season effects

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There are a great number of clinical and statistical studies confirming that the myocardial infarction number rises during geomagnetic disturbances, which have a maximum of occurrence near equinox. Contrary to that, the analysis of the daily numbers of Moscow ambulance calls (1979–1981), related to the myocardial infarction, showed the strong winter maximum and summer minimum. The similar result we obtained by using the 25 year data (1970–1995) on the death from infarction in Bulgaria. We analyzed the biotropic efficacy of 129 geomagnetic storms and found that its hazard depends on the season. About of 90% of the winter time magnetic storms were accompanied by the infarction enhancement, but only 3% of the summer magnetic storms led to the increasing of the cardiac problems. It means that the human organism stability to the “negative” influence of magnetic storms is stronger in summer than in winter. We also found that the different magnetic storm phases demonstrate the different hazard. As a rule, the storm main phase was not accompanied by the enhancement of the infarction number. However, the storm recovery phase typically leads to infarction increasing, particularly, if it was accompanied by the geomagnetic pulsation at periods of a few seconds.