

While energy flash terrified humanity for thousands of years of history, electricity produced by man serve humanity but also threatening , since 1879 , when Thomas Alva Edison discovered the electric light . its system delivery and use of energy was direct current , which is not suitable for high voltage power transmission over long distance. In 1885, he demonstrated another discovery . George Westinghouse has developed a system using alternating current transformers, which are designed to increase the voltage on the one hand and transmission distribution of energy, and reduce stress on energy consumption. ten years lasted feud between advocates of direct and alternating current, which was ended up using alternating current to Niagara Falls in 1895 and for execution by electric chair in 1900.

Passing a current through each wire heats up. electrical work made to the current passes through a conductor , all converted into heat. losses thermal energy is proportional to the resistance wire and increases the second square of the current . Therefore, it is advantageous when high energy performance over long distances transmit energy high voltage at low current in the line. With increasing demands on energy was necessary to develop appropriate preventive measures and technical security, as well as improved methods for evaluation and treatment elektrotraumat , which presents challenges for the entire medical community .

A multidisciplinary approach is required for the prevention, treatment and rehabilitation, because it is not only the physical site , but also - and this often mostly - on page mentally. The long-term consequences elektrotraumat is too often permanent disability . Given that the victims are children and young individuals , then the cost they bear not only patients and their families , but the whole society is immense.