CONTROL CO₂ MONITOR SOFTWARE-HARDWARE COMPLEX

Description
The complex performs capnographic monitoring of external respiration in man using the Bio-Feed-Back method. As a result of treatment, the normal respiration pattern is restored. The pathological effects related to the hyperventilation syndrome are eliminated. This is achieved by an arbitrary correction of respiration according to the specified parameters characterizing the normal ventilation level. In the process of a curing session, the patient tries to adjust his breathing to the individually chosen parameters. The latter are determined by the physician from the results of a diagnostic examination.

Technical appraisal and economic benefits
- non-drug treatment of bronchial asthma and other breathing troubles;
- objective control of the effectiveness of therapeutic breathing exercises and regimen;
The examination process is simple and takes little time.
The following parameters and rated indices are monitored in the on-line mode: capnogram, CO₂ concentration in the terminal portion of expiration, breathing frequency, respiratory cycle time, relative time of expiration, rhythmic breathing indices.

Application areas
The complex is used for:
- diagnostics of the hyperventilation syndrome and other ventilation disturbances of external respiration.
respiration, correction of these disturbances, and control of the effectiveness of therapeutic breathing exercises;
• treatment of the hyperventilation syndrome, bronchial asthma, hypertension, and ischemia;
• rehabilitation of patients with chronic obstructive pulmonary deceases and psychosomatic disorders of different genesis.

**Development stage**
The complex is used at the consulting room for the diagnostics and treatment of respiratory distress in children at the Child Polyclinic №1 of the Central Clinical Hospital of the SB RAS.

**Patent situation**
The stage of filing an application for documents of title.

**Commercial offers**
Contracts on the fabrication and supply of the complex, physician training.

**Estimated cost**
Price is to be negotiated.

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