

Physical therapy in general

Physical medicine is a practical application of physical treatment procedures and methods to the living organism.

History of physical therapy

Beginnings

Types of physical therapy such as mechanotherapy (friction) and hydrotherapy are already found in animals, when the injured part of the body is licked or dipped in water. China is the cradle of physical therapy, hydrotherapy was used around 4700 BC. In the 3rd millennium BC, the oldest textbook was written here, where hydrotherapy and massage procedures are described. In Europe around 770 BC, hydrotherapy flourished, and in Greece an extensive hydrotherapy complex has been preserved from that time. It is known that even Hippocrates used various traction and hydrotherapy methods.

Middle Ages

During the Middle Ages, spas began to flourish in Europe, but their main purpose was primarily as a place of entertainment, not a medical one.

The modern age to the present

With the development of medicine, physical therapy was put on the back burner and more in the hands of lay healers. In psychiatric institutions, electric shocks were used, which, of course, did not have a therapeutic effect, it was more about calming the patient down or trying to "get him out of his psychosis". It was not until Vincenc Priessnitz, thanks to his successes, highlighted physical therapy (mainly hydrotherapy) and since then physical therapy gained a better name in the eyes of the professional medical public and began to develop. Today, many types of energy and their effects on the body are already known, new and specialized devices are being developed, thanks to which the treatment is much more effective.

Division of physical therapy according to the energy used

Physical therapy uses almost most known types of energy as a therapeutic agent.

Energy	Therapy	Example
electric energy	electrotherapy	galvan, DF therapy, Ultra Reiz
energy of ionizing radiation	radiotherapy	teletherapy
magnetic field energy	magnetotherapy	distance therapy
acoustic energy	sonotherapy	ultrasound
mechanical energy	mechanotherapy	traction, massage
light energy	phototherapy	solux
thermal energy	thermotherapy	paraffin, warm baths

Mechanisms of energy effects on the organism

Direct effects

This group includes those effects that directly affect the tissue and its biochemical processes, mostly directly at the site of application, e.g. local hyperemia, reddening of the skin, etc.

Indirect effects

Here we would include those effects that act on a non-physiological basis. The effect is mediated by nerve or endocrine system.

Other effects

Here we would include effects that do not have a clearly known effect in advance, e.g. placebo, delay effect.

Contraindications of physical therapy

Each procedure has its special contraindications, which the rehabilitation doctor prescribing the procedure and the physiotherapist performing the procedure should know. However, a general set of contraindications is known, in these cases FT should not be applied at all (there are only a few individual deviations).

General contraindication	Application exception
pregnancy	electrotherapy (outside the pelvic and abdominal areas)
febrile conditions	hypothermic baths, cold compresses
scar, damaged skin, fresh injections	phototherapy
pacemaker	phototherapy, hydrotherapy (not galvanic!)
metal implants	phototherapy, hydrotherapy (not galvanic at the implant site!)
primary tumors, bearings TBC	TENS (also in metastases)

Indication

Each procedure has its indications, which the rehabilitation doctor prescribing the procedure and the physiotherapist performing the procedure should know. The indication spectrum is very broad, so it will be listed separately for individual procedures.

Links

References

- PODĚBRADSKÝ, Jiří – VAŘEKA, Ivan. *Fyzikální terapie. I.* 1.. edition. Grada Publishing, 1998. ISBN 8071696617.