

CONTRIBUTION TO OCCUPATIONAL ANGIOPATHY DIAGNOSIS USING SPECIAL EXAMINATION METHOD

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SUMMARY

The authors presented 1642 cases of professional diseases caused by vibrations (VD) and 435 cases of extremity overload disease (EOD) diagnosed in the years 1974 - 1993.

In addition to the standard rheoplethysmography there were evaluated the results of digital laser Doppler flowmetry (Moor-Instrument UK) in 104 workers exposed to vibration (EV) and 25 controls with the age and smoking habit standardisation. In the selected subgroup were used continual measurements of digital blood pressure (Finapres, Ohmeda), digital LD flux and speed and the measuring of digit skin and central body temperature simultaneously. The records before and after 10 min of local cooling test (Rejšek method) and postocclusive hyperemic tests were summarized (computer evaluation, program STATGRAPHICS, T-test).

Vasoconstriction to local cooling persisted in EV for longer time. The records of digital skin flux and speed, digital blood pressure reaction of EV were significantly different (EV/controls) also in the 10th min after cooling. Postocclusion hyperemic tests revealed good function capacity also in EV.

Advantages and disadvantages of methods were discussed. The results found by non-invasive methods in VD were in good relation images obtained by means of radionuclides (clearance and cumulative tests). Cumulative tests (after 99m - pertechnetate i.v.) can be used in the selected differential diagnostic cases of angiopathies to help to distinguish degree of angiospastic and angioparalytic changes in the hands at VD, and also in special cases at angiopathies connected with EOD.

Key words: workers exposed to vibration for a long time, rheography, digital blood pressure, digital laser Doppler flowmetry, central body temperature, digital skin temperature, radionuclide methods, cooling tests, hyperemic tests, simultaneous records

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