

# Factors effecting frequency of occurrence of back pain syndromes

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## Introduction

Low back pain syndromes are in the group of the commonest diseases observed in recent years and bear serious medical, social and economic burden. According to European data [1], more than 70% of population suffered from back pain at least for week in the lifetime, and 15 - 40% of population experienced low back pain every year. There is alarming decrease in the age of first onset described by many authors [2]. Peak of morbidity is observed in persons aged between 35 and 55 years, but Japanese study [3] brings evidence that 66,7% of middle school children has already experienced low back pain lasting for at least 1 week, and relapse rate exceeds 60%. Increase of incidence and morbidity of low back pain is linked to lifestyle alterations including significant limitation of physical activities since young age, changes of hobby preferences, alteration of work habits favouring activities in improper body position lasting for hours or even years, to dynamic physical activity.

The occurrence of such disorders in young people may be understandable when there are significant overloads associated with practising competitive sports [4], but degenerative changes with dehydration of the disc, its destruction [5,6] in young people, not subjected to such overloads, may be astonishing. Adults make extensive use of technological progress, the difference between mental and physical work is blurred. A white-collar worker spends many hours at a desk, a computer, and a manual worker often operates machines also using computer equipment. This leads to prolonged, strenuous static stress, and form relaxation after work do not differ from those preferred by young people: we sit for hours in front of TV-set and computer, continuing under the slogan „rest” overloading of the spine. Remember that sitting position is a form of significant overload,

contributes to more than 2,5 times the pressure in the lower lumbar discs to comparison to standing position, and more than 7 times in comparison to a lying position [7].

Pain may be presented in any phase of spinal overload syndromes. Back pain may result from nociceptive activation in spinal, paraspinal tissues as well as irritating of nervous structures within vertebral canal, when appears as a neuropathic pain. Pain in spondylolisthesis may be related to ligamentous constrain, particularly when posteriori longitudinal ligament (densely supplied with nociceptive endings) is involved.

Commonest back pain syndrome is resulting from long-lasting overload with their typical presentation.

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