



EFORT 2013: 7,500 orthopaedic specialists gather in Istanbul

Low back pain in children and adolescents: a growing problem

Recent research suggests a significant increase in the incidence of low back pain reported among children and adolescents. Prevalence increases with age, and may be a strong indicator of similar issues in adulthood. Causes remain an open question, experts reported at the EFORT Congress in Istanbul.

Istanbul, 6 June 2013 – A recent meta-analysis has suggested that the prevalence rates of low back pain in children and adolescents are higher in more recent studies compared to earlier studies. Dr Teija Lund (ORTON Orthopaedic Hospital, Helsinki), speaking on low back pain in this age group at the 14th Congress of the European Federation of National Associations of Orthopaedics and Traumatology (EFORT) in Istanbul, said it is still unclear whether these higher reported prevalence rates reflect a true increase in incidence or better recognition of the problem. "However, the past two decades have witnessed an increase in the research performed on this symptom in children and adolescents," said Dr Lund.

Dr Lund said that in the 1980s it was still believed that children should not have low back pain, and if they did, it was usually due to a severe pathology. "Epidemiological research has now shown that low back pain in this age group is a common phenomenon with reported prevalence rates of up to 60%. The prevalence increases with age, and reaches that seen in adults by late adolescence," said Dr Lund. Girls have a higher risk to develop back pain than boys.

According to a prospective long-term study carried out by Dr Lund two years ago 59% of healthy school age children followed through maturity experienced low back pain by the time they reached 18 to 19 years old. At the outset of the investigation when they were 7 to 8 years old, 9% of the children had reported experiencing low back pain, showing a clear increase in prevalence.

Modern lifestyle of children and adolescents: a risk factor?

Epidemiological studies have investigated the possible associated factors or risk factors for childhood and adolescent low back pain, with conflicting results. "Several studies have addressed the influence of life-style factors, among others overweight, smoking, physical activity, and 'screen time'. No definite conclusions can be made based on this research," explained Dr Lund. In fact the studies indicate that care must be taken with what may seem an obvious remedy, i.e. physical activity. "The studies suggest that both a sedentary life style and competitive sports would increase the risk of low back pain," said Dr Lund. However, she said, as most of these studies are cross-sectional and not longitudinal, they can only assess associations, and not causality.

Looking to the future: identify causes, develop preventive measures

Dr Lund emphasised the most important recent development is that the medical community has now started to pay attention to musculo-skeletal pain in children and adolescents,





especially low back pain. Since some studies suggest that low back pain in early life is the strongest predictor of adult low back pain, there are clear implications for individual health and health care costs. "If we think of the common nature of low back pain – almost all of us experience it at some point of our life – and its financial implications to the health care system and society in general, preventing low back pain as early as possible would be beneficial from both the individual's and society's perspective," Dr Lund said.

Thus Dr Lund said in the future, more longitudinal studies will be needed to identify possible risk factors for low back pain in children and adolescents so that efforts can be directed toward developing preventive measures for these specific factors.

About EFORT

The European Federation of National Associations of Orthopaedics and Traumatology (EFORT) is the umbrella organisation linking Europe's national orthopaedic societies. EFORT was founded in 1991 in the Italian Marentino. Today it has 42 national member societies from 43 member countries and six associate scientific members.

EFORT is a non-profit organisation. The participating societies aim at promoting the exchange of scientific knowledge and experience in the prevention and treatment of diseases and injuries of the musculoskeletal system. EFORT organises European congresses, seminars, courses, forums and conferences. It also initiates and supports basic and clinical research.

Source: EFORT Speciality Society Session: Low back pain in children and adolescents: Epidemiology and risk factors; Lund et al, Lumbar disc changes on MRI and low back pain. Lumbar Spine Annual Meeting 2011