



**EUROSPINE  
FOUNDATION**

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**The EUROSPINE Foundation**

A funder of spine research and education

## **Back pain: a common, but difficult problem with few solutions**

The spinal column is a highly complex organ with structural, mechanical and neuro-physiological functions that work together to allow our autonomy.

Anyone who has ever been treated for a back condition knows what it means to be a “back patient”. Back pain is the most prevalent of all conditions involving the human musculoskeletal system, second only to the flu as a cause for absenteeism from work. Sadly, back pain is also a condition for which we are often unable to provide an effective and reliable cure – in contrast to other conditions such as hip osteoarthritis, which can be treated effectively in over 95% of cases.



## What causes back and neck pain?

There are many causes of **back and neck pain**. Here are a few examples:

**Aging** is a primary cause of back pain. Degenerative diseases of the back represent approximately 80% of all back conditions. Fortunately many recover without intervention, however some people experience no improvement or even worsening of their situation. While some conditions are easily identified and may be treated effectively with exercise, physical therapy, medication or surgery, others are poorly understood, making consensus for treatment – conservative or surgical – unattainable. The patient is left with no definitive solution for his or her back problem.

**Injury** to the spinal column can have devastating consequences and often occurs in young people. It can leave them paralysed for life and confined to a wheelchair or worse. There is a desperate need to improve the outcome, rehabilitation and recovery for these patients.

**Deformity** such as scoliosis is another condition seen in both young and elderly patients. Apart from the deformity itself and its cosmetic consequences, the condition can have dramatic effects in terms of general health and daily functioning.

**Tumours** of the spine can affect the bony structures of the spine as well as the nervous tissue, leading to severe pain and loss of function and interfering dramatically with quality of life and survival.



## **The spinal column: a highly complex organ**

Understanding the function (physiology) and dysfunction (patho-physiology) is an essential prerequisite to managing and treating all of these conditions. It involves competences, research and resources from most fields of medical science, including bioengineering, material sciences, biochemistry, genetics, immunology, cell biology, neurophysiology, medical imaging, psychology, exercise physiology, and more...

## **Need for more intense research**

In order to gain a comprehensive understanding of the normal and pathological spinal column, **fundamental research is required**. Only once we have attained this knowledge will we be in a position



to properly **diagnose** and **design effective means of treatment** for the various spinal diseases.

The treatment of spinal disorders is one of the most challenging topics in medicine today, with significant social, ethical and economic issues at play. The assessment of validity, safety and effectiveness of existing and newly-designed treatments is the subject of **prospective, preferably randomised, multicentre clinical trials**. **International registries** are needed to provide assessments on a large scale to integrate standardised data on patient characteristics, diagnosis, treatment means, complications – and most importantly – validated patient-reported outcome measures. Patient feedback provides valuable first-hand insight into the effectiveness of treatments as experienced by the patients themselves.

This knowledge must then be communicated to care providers: general practitioners, chiropractors, physiotherapists, psychologists, rehabilitation specialists, rheumatologists, surgeons... young or experienced, through well-structured and internationally-recognised **educational programmes**.

### **How your donation to the EUROSPINE Foundation can make a difference**

The **EUROSPINE Foundation** is dedicated to the advancement of our knowledge of spinal disorders, improving the standard of care,



and the recovery and well-being of patients with back and neck problems. The Foundation supports the development of new treatments, evaluation of existing ones and the education of care providers at the highest, evidence-based level.

The **EUROSPINE Foundation funds**, among others, the **education and research programmes of EUROSPINE, the Spine Society of Europe**. Through its membership, EUROSPINE is highly experienced and active in all of the following fields:

- **Research:** EUROSPINE's **Task Force Research** annually subsidises high-quality fundamental and clinical research projects, selected according to the most stringent criteria.
- **Data collection and analysis:** The **Spine Tango Register** allows for large-scale, international assessment of spinal disease treatments and outcomes through the collection and analysis of data provided by participating centres.
- **Education:** EUROSPINE provides life-long learning opportunities to young as well as experienced spine specialists from Europe and all over the world. The comprehensive educational platform consists of modules with up-to-date curricula presented by recognised experts. Courses on research methodology in spine are also offered.
- **Meetings:** The **Annual Meeting and Spring Meeting** offer a unique occasion to share knowledge and network with spine specialists from all over the world.

Follow our activities on: [www.eurospine.org](http://www.eurospine.org)



## Help support spinal education and research

**Education** and **research** in particular are always short of funding for addressing the challenges that we face for improving spinal care.

Each and every contribution, however small, is precious and will go a long way.

Please, go to:  
[www.eurospinefoundation.org](http://www.eurospinefoundation.org)  
**MAKE A DONATION**

Please give generously. Your donation will help us improve spinal care for you and future generations. The EUROSPINE Foundation thanks you for your support.