



## **TITLE: The Filum Disease and the Neuro-Cranio-Vertebral Syndrome: Definition, Clinical Picture and Imaging Features**

**Name:** Miguel B. Royo-Salvador<sup>1</sup>, Marco V. Fiallos-Rivera<sup>1</sup>, Horia C. Salca<sup>1</sup>, Gabriel Ollé-Fortuny<sup>2</sup>

**Affiliation:** <sup>1</sup>Institut Chiari & Siringomielia & Escoliosis de Barcelona, Barcelona.

<sup>2</sup>Anesthesia Department, CIMA Hospital, Barcelona.

**Country:** Spain

**Email ID:** [mroyo@institutchiaribcn.com](mailto:mroyo@institutchiaribcn.com)

### **ABSTRACT (upto 300 words)**

#### **BACKGROUND:**

We propose two new concepts, the Filum Disease (FD) and the Neuro-cranio-vertebral syndrome (NCVS), that group together conditions thus far considered idiopathic, such as Arnold-Chiari Syndrome Type I (ACSI), Idiopathic Syringomyelia (ISM), Idiopathic Scoliosis (IS), Basilar Impression (BI), Platybasia (PTB) Retroflexed Odontoid (RO) and Brainstem Kinking (BSK).

#### **METHOD:**

We describe the symptomatology, the clinical course and the neurological signs of the new nosological entities as well as the changes visible on imaging studies in balance alteration 72% and paresthesias 70%. The commonest neurological signs were: altered deep tendon reflexes in upper extremities 86%, altered deep tendon reflexes in lower extremities 82%, altered plantar reflexes 73%, decreased grip strength 70%, altered sensibility to temperature 69%, altered abdominal reflexes 68%, positive Mingazzini's test 66%, altered sensibility to touch 65% and deviation of the uvula and/or tongue 64%. The imaging features most often seen were: altered position of cerebellar tonsils 93%, low-lying Conus medullaris below the T12L1 disc a series of 373 patients.

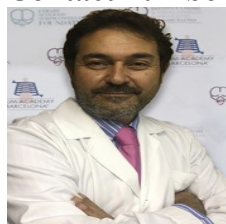
**RESULTS:** Our series included 72% women with a mean age of 33.66 years; 48% of the patients had an interval from onset to diagnosis longer than 10 years and 64% had a progressive clinical course. The commonest symptoms were: headache 84%, lumbosacral pain 72%, cervical pain 72%, 88%, idiopathic scoliosis 76%, multiple disc disease 72% and syringomyelic cavities 52%.

**CONCLUSIONS:** This is a paradigm shift that opens up new paths for research and broadens the range of therapeutics available to these patients.

**Presenter Name:** Jose M. Arteaga-Armas.

**Mode of Presentation:** Poster.

**Contact number:** (+34) 932 800 836



Upload your photo here.

### **BIOGRAPHY (upto 200 words)**

Miguel Royo-Salvador has completed his PHD at the age of 35 years from Universitat Autònoma de Barcelona, Spain. He is the head of Institut Chiari & Syringomyelia & Scoliosis of Barcelona and previously he was the head of the Neurosurgical department of Hospital del Mar, Barcelona, Spain. He has over 100 publications that have been cited over 500 times, and his publication h-index is 25. He has been serving as a scientific congress board member of several National and International Neurosurgical Congress and Summits.