Filum Disease and Neuro-Cranio-vertebral Syndrome with Arnold-Chiari Syndrome I, Idiopathic Syringomyelia, Idiopathic Scoliosis: **Quality of Life**

This study investigates the neuropsychological impact of Filum disease and Neuro-Cranio-vertebral syndrome on patients' Quality of Life (QoL). A retrospective analysis of 372 patients with Filum disease revealed that the disease significantly deteriorates both physical and psychological health, with symptoms such as pain, instability, paresis, and cognitive dysfunction affecting QoL. Additionally, mood disorders and sexual dysfunction were common. The gradual worsening of these symptoms negatively influenced patients' self-perception and expectations in various life areas. The study emphasizes the importance of considering these factors in diagnosis, treatment, and postoperative evaluations to improve patient outcomes.

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1 Introduction

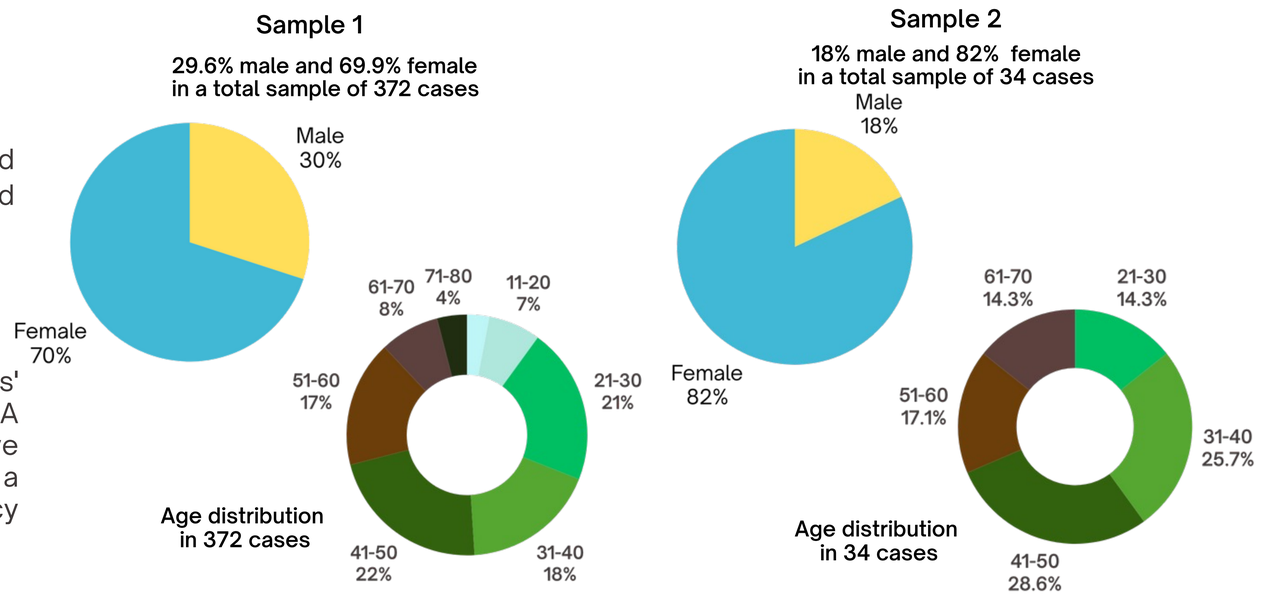
Filum disease and Neuro-Cranio-vertebral syndrome result from asynchronous growth between the nervous system and spine, causing excessive tension through the filum terminale. While Filum disease is congenital, Neuro-Cranio-vertebral syndrome typically arises from trauma or other factors. These conditions encompass diseases like Arnold-Chiari type I Syndrome, idiopathic syringomyelia, and idiopathic scoliosis, which were once considered idiopathic. Filum disease presents with a variety of symptoms such as headaches, neck and low back pain, impaired balance, and neurological signs like altered reflexes and reduced strength. Imaging often shows cerebellar tonsil descent, low-lying conus medullaris, syringomyelia, and scoliosis. Many patients seek treatment for deteriorating Quality of Life (QoL), which is often negatively impacted by both physical and psychological symptoms. Despite the significance of emotional health, it is frequently overlooked in diagnoses, leading to delays in appropriate treatment and worsening QoL.

2 Objective

This article aims to explore the neuropsychological alterations in Filum disease and their influence on QoL, emphasizing the importance of addressing both physical and psychological aspects in early diagnosis and treatment planning.

3 Material and Methods

This study examined the clinical picture of Filum disease and its impact on patients' quality of life, focusing on psychological-emotional health before any treatment. A retrospective analysis of 372 patients (Sample 1) was followed by a qualitative analysis of 34 patients' self-reported symptoms (Sample 2), collected using a structured inventory. Data were analysed using SPSS to explore symptom frequency and intensity.



4 Results

In Sample 1 patients reported memory alterations (33.9%), sleep-wake cycle alterations including insomnia (42%) and hypersomnia (5.8%), speech disorders (17.5%). Patients also reported anxiety and disorientation/confusion at lower frequencies.

In Sample 2 patients reported alterations in memory, sleep-wake cycle, language, in addition to symptoms in the field of sexual dysfunctions. Some of these symptoms included decreased sexual desire (59%), difficulty to reach orgasm (56%), and difficulty to maintain arousal (53%). Furthermore, 35% of the sample reported a decrease in pelvic sensitivity.

5 Analysis

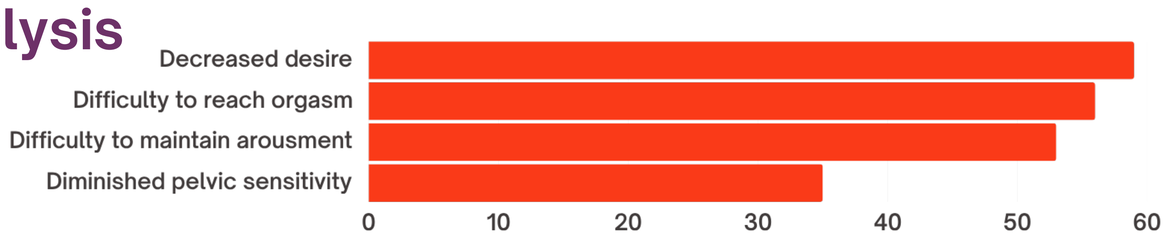


Chart 1: Frequency of symptoms detected in Sample 2 in the field of sexual disfunctions

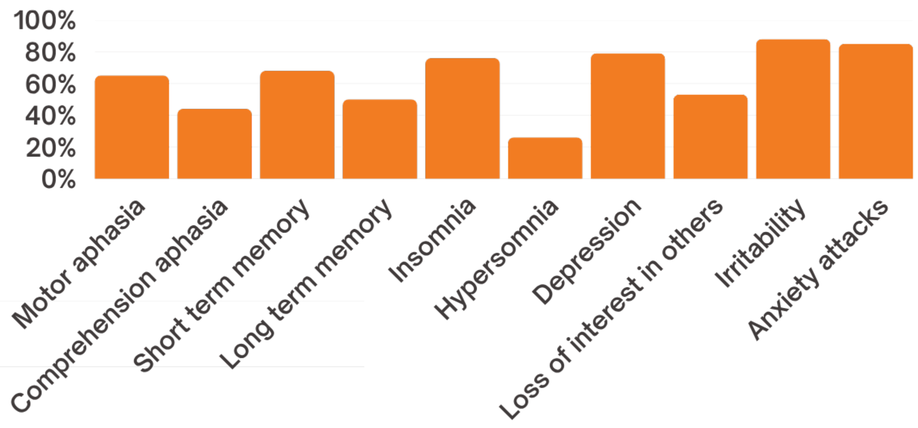


Chart 2: Frequency of symptoms detected in Sample 1 that directly effect the patients' Quality of Life.

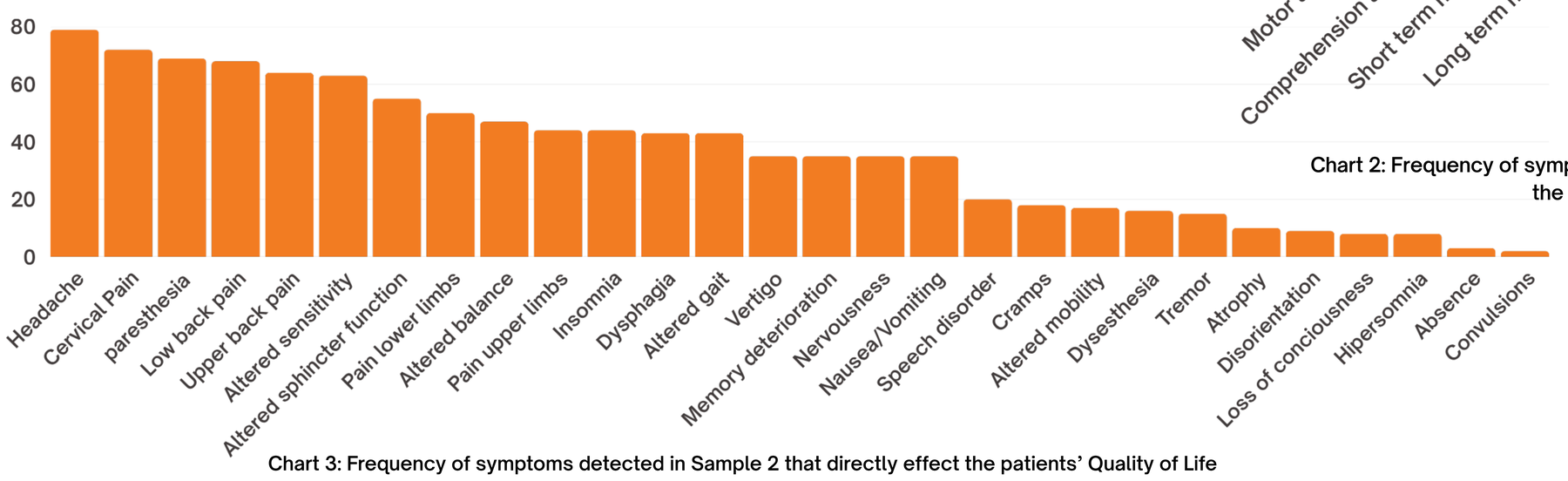


Chart 3: Frequency of symptoms detected in Sample 2 that directly effect the patients' Quality of Life

6 Conclusion

- Filum disease (Syringomyelia, Arnold Chiari I, Scoliosis) is a chronic, degenerative condition that severely impacts patients' physical and emotional well-being.
- Without timely and accurate diagnosis, patients experience worsening symptoms and diminished Quality of Life.
- **In order to stop the progression of the condition, the traction on the whole nervous system needs to be eliminated by Sectioning of the Filum Terminale [4].**
- A appropriate solution to patients with Filum disease is to assess the subjective position of the affected individual while the doctor understands what is causing their condition.

Related literature
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3. Royo-Salvador, M. B. Filum System-A Brief Guide. (Chiari & Scoliosis & Syringomyelia Foundation, 2017).
4. Royo-Salvador, M. B., Solé-Llenas, J., Doménech, J. M. & González-Adrio, R. Results of the section of the filum terminale in 20 patients with syringomyelia, scoliosis and Chiari malformation. Acta Neurochir. (Wien). 147, 515–523 (2005)