Congenital scoliosis

The term “congenital scoliosis” refers to a spinal deformity caused by vertebrae that are not properly formed. This occurs very early in development; in the first six weeks of embryonic formation.

Congenital scoliosis does not seem to run in families. Genetic studies to date have not yielded much evidence that this condition can be inherited. Although congenital scoliosis is often discovered during the infant or toddler period, in some children it does not diagnosed until their adolescent years.

The aims of a study were to determine the incidence and main characteristics of associated intraspinal anomalies in patients with congenital scoliosis (CS) and to analyze the different factors that influence the curve progression.

This was a retrospective study of 128 patients with CS.

The incidence of the patients with intraspinal anomalies and their demographic, clinical, and radiological values was described.

Intraspinal anomalies were present in 13.3% of the patients. Among them, the most frequent anomaly was syringomyelia. The most frequent curve was the thoracic curve. The main deformity based on McMaster classification was formation failure. The curve progression during follow-up did not show significant differences between vertebral anomalies, syringomyelia, presence of thoracic anomalies, and gender ($P > 0.05$).

The study showed a lower percentage of spinal anomalies compared to other series. As other studies, the progression of the scoliosis curve in patients with spinal anomalies seems primarily to be determined by the type of vertebral malformation.

Level of Evidence: Level II [1)].

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Mariscal G, Nuñez JH, Bhatia S, Marsh R, Barrios C, Domenech-Fernández P. Frequency and characteristics of congenital intraspinal abnormalities in a cohort of 128 patients with congenital scoliosis. J Craniovertebr Junction Spine. 2019 Oct-Dec;10(4):229-233. doi: 10.4103/jcvjs.JCVJS_116_19. Epub 2020 Jan 23. PubMed PMID: 32089616; PubMed Central PMCID: PMC7008656.