Review J Clin Med. 2023 Aug 9;12(16):5182. doi: 10.3390/jcm12165182.

# Current Knowledge on the Different Characteristics of Back Pain in Adults with and without Scoliosis: A Systematic Review

Fabio Zaina [1], Rosemary Marchese [2], Sabrina Donzelli [1], Claudio Cordani [3 4], Carmelo Pulici [1], Jeb McAviney [2], Stefano Negrini [3 4]

Affiliations

PMID: 37629224 PMCID: PMC10455254 DOI: 10.3390/jcm12165182

Free PMC article

## Abstract

Patients with scoliosis have a high prevalence of back pain (BP). It is possible that scoliosis patients present with specific features when experiencing back or leg pain pathology. The aim of this systematic review is to report the signs, symptoms and associated features of BP in patients with scoliosis compared to adults without scoliosis during adulthood. From inception to 15 May 2023, we searched the following databases: PubMed, EMBASE, the Cumulative Index to Nursing and Allied Health Literature (CINAHL), and Scopus. We found 10,452 titles, selected 25 papers for full-text evaluation and included 8 in the study. We found that scoliosis presents with asymmetrical pain, most often at the curve's apex, eventually radiating to one leg. Radiating symptoms are usually localised on the front side of the thigh (cruralgia) in scoliosis, while sciatica is more frequent in non-scoliosis subjects. These radiating symptoms relate to rotational olisthesis. The type and localization of the curve have an impact, with lumbar and thoracolumbar curves being more painful than thoracic. Pain in adults with scoliosis presents specific features: asymmetrical localization and cruralgia. These were the most specific features. It remains unclear whether pain intensity and duration can differentiate scoliosis and non-scoliosis-related pain in adults.

**Keywords:** back pain; disability; low back pain; lumbar spine; scoliosis.

## Figures

**Figure 1** Study flow chart.

## Related information

MedGen