

A BIBLIOMETRIC ANALYSIS ON WHITE SPOT LESIONS (WSLs) IN FIXED ORTHODONTICS

**Dr. Harini Ramaswamy¹, Dr. Deepak², Dr. Nidhi Angrish³, Dr Akshay Tandon⁴, Dr Praveen Katepogu⁵ &
Dr. Deenadayalan Purushothaman⁶**

¹Bachelors of Dental Surgery (BDS), SRM University, Kattankulathur, Chennai, Tamil Nadu, India

²HOD, Department of Orthodontics, SRM University, Kattankulathur, Chennai, Tamil Nadu, India

^{3,4,5}Assistant Professor, Department of Orthodontics, SRM University, Kattankulathur, Chennai, Tamil Nadu, India

⁶Co Author, Professor, Department of Orthodontics, SRM University, Kattankulathur, Chennai, Tamil Nadu, India

ABSTRACT

An article's potential to influence future research and change therapeutic practices is often indicated by a high number of citations. Researchers can identify influential papers and gain insight into their salient features by analyzing the most often cited papers in a specific field of science. This current study sought to conduct a bibliometric review to analyze the top cited papers related to White spot lesions in orthodontics(1).

Enamel decalcification is a consequence of orthodontic treatment (2). The objective of orthodontic treatment is to improve both the aesthetic appearance of the face and the arrangement of the teeth. Teeth that have been banded or bonded exhibit a significantly increased prevalence of WSLs when compared to those without braces, primarily due to the way fixed orthodontic appliances and bonding materials promote the retention of biofilms(3). This bibliometric analysis focuses on original research articles concerning white spot lesions in orthodontics between the years 1976 and 2023, encompassing all such articles extracted systematically from the SCOPUS database. The study encompassed a total of 216 articles, the number of sources being 111, accumulating 23.27 average citations per document. Furthermore, 14.8% of these articles were published in the Journal Caries Research, with 841 authors, 8 under authors of single authored documents or co-authored by 4.69 co-authors per document, international co-authorship of 21.76% with an annual growth rate of 6.9% (4). Among the most cited papers on this topic, only a handful of systematic reviews and interventional studies were found.

KEYWORDS: *White Spot Lesions, Orthodontics, Dental Fluorosis, Bibliometric Analysis*